



HEALTH PROMOTION IN A MILITARY HOSPITAL:  
PERSONAL BEHAVIORS, ATTITUDES, BELIEFS AND  
PRACTICES OF HOSPITAL NURSES

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Science

By

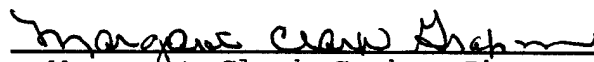
AUDREY MARIE BOLTON  
B.S.N., Angelo State University, 1984  
A.D., Angelo State University, 1982

1996  
Wright State University

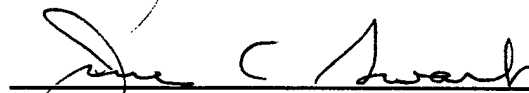
WRIGHT STATE UNIVERSITY  
SCHOOL OF GRADUATE STUDIES

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I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY Audrey Marie Bolton ENTITLED Health Promotion in a military hospital: personal behaviors, attitudes, beliefs and practices of hospital nurses BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Science.

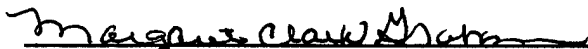


Margaret Clark Graham, Ph.D., RN  
Thesis Director



Jane C. Swart, RN, Ph.D.  
Dean, College of Nursing and Health

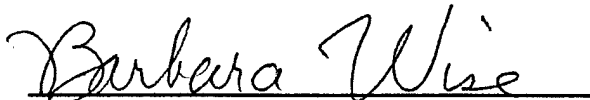
Committee on  
Final Examination



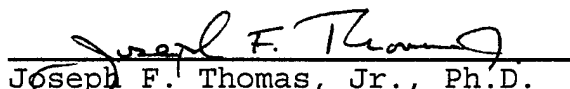
Margaret Clark Graham, Ph.D., RN



Roberta L. Pohlman, Ph.D.



Barbara Wise, MSN, RN



Joseph F. Thomas, Jr., Ph.D.  
Dean, School of Graduate Studies

## ABSTRACT

Bolton, Audrey Marie. M.S., Wright State University-Miami Valley College of Nursing and Health, Wright State University, 1996. Health Promotion in a Military Hospital: Personal Behaviors, Attitudes, Beliefs and Practices of Hospital Nurses.

Current federal and state reform initiatives address the significant cost savings of prevention and health promotion services and consider these services central to future community-based systems of health care. Few studies have been conducted in the United States regarding the delivery of health promotion services in the acute care setting. Little is known about the role of the staff nurse caring for the inpatient population in regard to the health promotion services these nurses provide. The purpose of this study was to: a) examine and describe the personal health promoting lifestyle behaviors of a group of nurses working on acute care wards in a military treatment facility; b) identify nurses attitudes and beliefs about health promotion activities in professional nursing practice; and c) examine and describe the professional health promotion practices of nurses within the

inpatient setting, specifically the health education activities pertaining to smoking, alcohol, exercise, and nutrition.

This descriptive, correlational study was conducted at a 301 bed acute care military Medical Center located in southwestern Ohio. The study is a systematic replication of a study conducted in Oxford, England. The study was conducted using a nonprobability sample (n= 49) of military staff nurses working on adult inpatient wards. The Health Promoting Lifestyle Profile II (HPLP II) and sociodemographic survey questions were utilized to collect data pertaining to self-reported health lifestyle behaviors. The modified version of the Health Promotion in Hospital Practice instrument was used to collect data pertaining to self-reported attitudes, beliefs and practices in the hospital setting. This study incorporated specific background variables pertaining to the nurse into Cox's Interaction Model of Client Health Behavior highlighting the importance of the professional nurses role in health promotions.

Descriptive statistics were used to describe the sociodemographic characteristics, health behaviors, attitudes, beliefs and practices of the sample. The average participant in this research study was an Active Duty female between the ages of 22 and 46 who graduated from a BSN nursing

program as their basic nursing education. The strongest dimensions of a healthy lifestyle among the nurses surveyed were behaviors regarding health responsibility, nutrition, and interpersonal relations. These findings are compared to the findings of the study conducted by Lusk, et al., (1995) which investigated the health promotion lifestyles of blue collar, skilled trade, and white collar workers in one worksite in the Midwest.

The findings of this study revealed that attitudes and beliefs about the nurses' role in health promotions are generally positive. Overall, nurses accept their role as health promoters and perceive strong links between lifestyle and disease. Many nurses feel they do not have enough time to practice personal health promotion and they feel they lack education in health promotion and therefore do not consistently incorporate health promotion into professional practice. Opinions regarding the nurses' belief in the effectiveness of giving advice vary among nurses. In terms of professional practice, nurses are inconsistent with regard to questioning, advising and recording the health habits of inpatients. A variety of views regarding hospital-based health promotion issues were offered by nurses. Many of the findings are consistent with the findings in the McBride study (1995).

The findings of this research study revealed that there were no relationships between demographic characteristics and personal health promoting lifestyle behaviors. In addition, there is not a significant relationship between personal health promoting lifestyle behaviors and health promotion education provided by nurses.

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## I. INTRODUCTION

Health care in the United States is undergoing a major transformation. Growing demands on the health service industry are the result of worldwide medical advances and longer life expectancy (Beske, 1994). Health care reform initiatives address the complicated, costly insurance system, profiteering within the system, hospital restructuring, ethical issues in regard to spending health care dollars, and governmental involvement in health care policy (Bruder, 1993). At the federal level, health care is acknowledged to be at the limit of its resources and fundamental changes are proposed in both the design and methodology of health care delivery (Sharp, 1991). Communities are working to restructure current health care delivery systems, with an emphasis on prevention, wellness and health, which is beginning to shift the focus from the traditional illness-based models of care (Porter-O'Grady, 1994).

In response to economic forces driving cost-containment and the nations' shift toward preventive care, the Department of Defense has

incorporated preventive services as part of universal health care coverage for beneficiaries within the military health care system. The three goals of these services are to prevent the premature onset of disease and/or disability, help beneficiaries achieve and/or maintain a healthy productive life, and reduce health care costs (Major S. Jez, DOD Health Service Region V, March 14, 1995). The delivery of preventive services is also addressed in the military's new health care system, Tricare Prime. This supplemental insurance plan purportedly will offer medical care at lower costs than Champus, the current military health insurance plan (Champus, 1995). While decreasing medical costs, the greatest improvement of beneficiary health in Tricare Prime is anticipated to be from the provision of preventive services (Major S. Jez, personal communication, April 5, 1995).

Currently, preventive care within the military health care system is comprised of employee health programs, health promotion programs directed at "well" beneficiaries, and individualized outpatient services for beneficiaries during clinic visits (Smith, 1994). Within the hospital, inpatients receive limited intervention strategies specifically aimed at health promotion. Tertiary preventive services for inpatients are directed at the cure and treatment of acute conditions and is limited to diagnoses-specific



patient teaching interventions in preparation for discharge or transferral to extended care facilities.

### Statement of Problem

Within the acute care setting in military hospitals health promotion initiatives are generally not comprehensive in that there is no formal network or designated professional health care provider responsible for implementing health promotion strategies for inpatients. What is the professional nurses' role in health promotion within the acute care setting in military treatment facilities? It is not known what are the hospital nurses' personal health promoting lifestyle behaviors. Little is known regarding nurses' attitudes and beliefs about health promotion practices within the inpatient setting. It is not known to what extent nurses engage in inpatient educative activities regarding smoking, alcohol, exercise and nutrition. Lastly, it is not known if personal health promoting lifestyle behaviors are related to demographics and whether personal health promoting lifestyle behaviors and/or demographics influence nurses' professional practice in a military hospital.

### Significance and Justification

The United States has long realized the importance of disease prevention and health promotion. Healthy People 2000, initiated by the Department of Health and Human Services, has set goals to improve the health of all Americans by the year 2000. The initiative's aim is characterized by a reduction in preventable deaths and disability, enhanced quality of life, and an increased lifespan (USDHHS, 1990). The overall objectives in targeting improvements in the health of adults is to "reduce the death rate by 20 percent to no more than 340 per 100,000 people aged 25 through 64" (USDHHS, 1990 p. 577). The report highlights the role of health services in preventing chronic disease in adults and emphasizes that "..counseling may be even more valuable than conventional clinic activities to prevent disease, such as many screening tests" (USDHHS, 1990, p. 22).

According to the Surgeon General's report (Healthy People: USDHHS, 1980) it was estimated that at least 50% of the deaths in the United States each year were due to unhealthy lifestyles. More recently, the report "For a Healthy Nation: Returns on Investing in Public Health" (USDHHS, 1994) highlights this continued trend in the United States. The report states approximately 50% of deaths in people under age 75 years are

caused by personal behaviors that can be modified (USDHHS, 1994). Additionally, it reports other major causes of premature death which pertain to environmental factors under human control. The top ten underlying causes of death in 1990 were related to tobacco, diet, inactivity, alcohol, microbial agents, toxic agents, firearms, sexual behavior, motor vehicles, and illicit drugs (Wittmer, 1993). In addition, chronic disability and psychological distress are a direct result of preventable conditions such as heart disease, cancer, stroke, injuries, HIV infection, alcoholism, and drug abuse. Costs for treatment for selected preventable conditions are significant and demonstrate the cost-benefits of preventive services (Rheinstein, 1992), and according to cost-benefit analysis, Hastings (1995) determined prevention to be the single most effective long-term cost-containment strategy available.

A number of studies have examined the lifestyle risks and health status of military personnel and their families. Some studies have typically found a higher rate of both smoking and alcohol use among active duty military members compared to their civilian counterparts (Johnson et al., 1993; Bray et al., 1991). Other military health promotion studies address physical fitness and cardiovascular disease risk factors, health behaviors of

military retirees, lifestyles of military personnel and their families, and health goals of active duty members (Wright et al., 1994; Haddock et al., 1995; & Jonas, 1994).

Haddock et al., (1995) examined cigarette and alcohol use in a group of military retirees. The findings revealed smoking rates and alcohol use among military retirees and dependents were similar to those reported in surveys of the general senior population. Additional findings revealed that younger subjects and those with higher military rank at retirement (or rank of sponsor at retirement) were less likely to be smokers. In contrast, higher military rank at retirement was related to an increase in alcohol use among retirees and dependents. Wright et al., (1994) investigated physical fitness and cardiovascular risk factors in male senior military officers. The participants' health status was determined from measurements of lipoprotein profiles, body composition, peak oxygen consumption, and strength. Overall, findings reflected an apparently healthy diet and lifestyle. Among the participants, lower total cholesterol and smoking rates were noted in comparison to the average civilian 45 year old. In addition, results indicated that the military officers generally have a high aerobic capacity, are normotensive, non-obese, and at low risk for development of

cardiovascular disease. Younger Army soldiers were investigated by Jonas (1994) in which the participants ranged in ages from 17 to 58 years with the average age being 30 years. Findings revealed differences between the soldiers health goals and health needs. Soldiers identified the most important health goals which were to improve self-esteem (50%) and family relationships (43%), increase exercise (41.5%), and improve diet (33.6%). Among the most significant detrimental health habits among the soldiers were smoking (28.8%), followed by lack of regular physical exercise (27.5%), high-fat diet (27.2%), and overweight (23%). The focus of this study was to compare differences between health promotion needs and personal goals of soldiers and, within the study, findings were not compared to studies that address the health promotion needs and personal goals of civilian counterparts.

Military studies highlight the distinctive conditions in military life which may contribute to the overall lifestyle and health status of military members. Subsequently, military bases are analyzing and revising health promotion strategies in order to effectively target high risk groups, particularly those at greatest risk for smoking and alcohol use. The need for preventive services and health promotion is significant in terms of reducing

health costs, improving the health and well-being of military personnel and their families and ensuring a fit military force (Johnson et al, 1993).

Presently, preventive services on military installations are standardized in accordance with regulatory directives from organizations such as Occupational Safety and Health Administration (OSHA) and the Center for Disease Control and Prevention (CDC). The aim of OSHA is centered on employee health and worksite safety and the CDC focus is primarily infection prevention and control. Beyond these programs, however, preventive services for patients are limited, vary among providers of care, and are not integrated within the health care delivery system (Major S. Jez, personal conversation, April 11, 1995). The Office of Disease Prevention and Health Promotion coordinated with the U.S. Public Health Service to create a preventive care program entitled Putting Prevention Into Practice. Department of Defense (DOD) has directed integration of this widely implemented program within U.S. Air Force, Army, Navy, and Coast Guard hospitals and clinics in order to standardize preventive practices among providers of care (OPSHA conference, 1994). The prevention program is directed by physicians, physician assistants and nurse practitioners in the outpatient setting. The role of the professional

staff nurse is not explicitly defined, yet physicians are realizing the importance of collaborating with nurses in the outpatient setting in providing health promotive services and are gaining an appreciation for the role of the nurse in prevention and health promotion (Griffith & Diguiseppe, 1994).

Health and health promotion are fundamental concepts for nursing practice (Spellbring, 1991). The American Nurses Association (ANA) Social Policy Statement reflects nursings' commitment to the promotion of health and links the nature and scope of nursing practice to the phenomena of concern to nurses which is defined as "human responses to actual or potential health problems" (ANA, 1980, p. 9). As patient advocates, promoters of self-care and health educators, nurses have proven to be competent practitioners in the provision of preventive services (Spellbring, 1991). Continuing these vital services is imperative as health care systems restructure the delivery of care, placing greater emphasis on prevention and health promotion.

The inpatient setting, however, lacks a systematic approach to health promotion services and the role of the staff nurse in health promotion within the hospital is unclear. Studies that describe nurses'

behaviors, attitudes, beliefs and practices of health promotion in the acute care setting may identify trends among nurses as health educators and role models. Specific insights gained through research describing nurses' behaviors, attitudes, beliefs and practices in the acute care setting will guide implementation of collaborative health promotion strategies for the inpatient population. Incorporating a seamless approach to health promotion services between the hospital, clinics, and the basewide community would benefit beneficiaries of military treatment facilities. Strategies to enhance health promotion behaviors are cost effective by reducing the incidence of preventable disease and complications.

### Purpose

The purpose of this study is to: a) examine and describe the personal health promoting lifestyle behaviors of a group of nurses working on acute care wards in a military treatment facility; b) identify nurses attitudes and beliefs about health promotion/prevention activities in professional nursing practice; and c) examine and describe the professional health promotion practices of nurses within the inpatient setting.



### Research Questions

1. What are the demographics of the sample?
2. What are the personal health promoting lifestyle behaviors specific to this group of nurses?
3. What are the health promotion attitudes and beliefs present in nurses working in military hospitals?
4. To what degree are nurses providing health education services regarding smoking, alcohol, exercise and nutrition?
5. Is there a relationship between the individual subscale scores or the overall score of the Health Promoting Lifestyle Profile II and the age, gender, educational level, number of years in nursing practice and area of clinical expertise?
6. Is there a relationship between the overall score of the HPLP II and reported health education services regarding smoking, alcohol, exercise and nutrition among nurses working in the acute care setting in military hospitals.
7. What are the additional comments made regarding health promotions among nurses working in a military hospital?

### Definition of Terms

Health- "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1947).

Health promoting lifestyle behaviors- "a multidimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the level of wellness, self actualization and fulfillment of the individual" (Walker, Sechrist & Pender, 1987). Health promoting lifestyle behaviors were measured using the Health Promoting Lifestyle Profile II (Appendix A). This instrument identifies the frequency of self reported health promoting behaviors related to self actualization, health responsibility, exercise, nutrition, interpersonal support and stress management (Walker, Sechrist & Pender, 1987). Each of the six categories of health behaviors exists as a subscale measurement. The total score refers to the summation of all subscale scores.

Professional Health Promotion Practices- Health care interventions directed toward growth and improvement of well-being. They are educational in nature and stress an awareness of the benefits of healthy living. Practices are aimed to improve or maintain health. Specific topics

address tobacco usage, alcohol abuse, nutrition, and exercise. Health promotion activities as measured by the modified version of Health Promotion in Hospital Practice Instrument (Appendix B).

Nurse- Hospital based licensed registered nurses on adult medical, surgical and obstetric- gynecological wards, whose patients are able to make lifestyle choices. Includes civilian and military nurses ranging in experiences from novice to expert.

Military hospital- 301 bed Air Force medical center. Provides health care for 570,000 visits and 10,000 admissions including community health care and referral services. Supports military readiness, educational and research missions.

Health promotion attitudes- a dynamic, disposition, opinion or viewpoint toward health promotion practice as measured by the modified version of the Health Promotion in Hospital Practice instrument (Appendix B).

Health promotion beliefs- internalized convictions regarding health promotion practices as measured by the modified version of the Health Promotion in Hospital Practice instrument.

Role Model- A person who inspires others to imitate his or her persona. Webster's dictionary (1957) defines role model as a person whose behavior in a particular role is imitated by others.

### Assumptions

1. People operate on the basis of cognitive information.
2. People want to assume control of their own health problems.
3. Participants will answer survey questions honestly.
4. Nurses who practice health promotion themselves will serve as more effective role models for patients.
5. Nurses attitudes and beliefs about health promotion will influence their professional practice regarding health promotion activities.

### Limitations

1. This study will be conducted in adult acute care settings within a military hospital which will limit generalizability .
2. Convenience sample limits generalizability.

### Summary

Research findings reveal the impact of preventive care and health promoting interventions toward disease prevention and enhanced quality of life (Rheinstein, 1992)). Current federal and state reform initiatives address the significant cost savings of preventive services and consider these services central to future community-based systems of delivery of health care (Hastings, 1995). Few studies have been conducted in the United States regarding the delivery of preventive services in the acute care setting. Little is known about the staff nurses' role in providing health promotion services for the inpatient population. This knowledge gap needs to be filled as the information is vital for military health care professionals to respond to federal directives prioritizing preventive services in military hospitals. Findings regarding the behaviors, attitudes, beliefs and practices of medical/surgical and obstetrical/gynecological nurses will promote the integration of health education for the inpatient population.

Chapter II is a review of the non-empirical and empirical literature. It also includes the conceptual framework "Interaction model of client health behavior". Chapter III outlines the methodology for conducting this research. Chapter IV will present the data analysis. Lastly, Chapter V will

present the summary of the findings, conclusions, implications, and recommendations for further study.

## II. REVIEW OF LITERATURE

The purpose of this study is to: a) examine and describe the personal health promoting lifestyle behaviors of a group of nurses working on acute care wards in a military treatment facility; b) identify nurses' attitudes and beliefs about health promotion activities performed in the scope of professional nursing practice and; c) examine and describe the professional health promotion practices of nurses within the inpatient setting. The concepts reviewed in the literature review are health promotion, prevention, and the conceptual framework. The empirical review of the literature addresses personal health promoting lifestyle behaviors of women and university students, attitudes, beliefs and practices of health care professionals toward health promotion, and nurses as role models.

## Nonempirical Review of Literature

### Health promotion

Following is an overview of the various perceptions and definitions related to the concept of Health promotion. The term, health promotion, is difficult to define. Health promotion has been used interchangeably with disease prevention, health education, and health maintenance (King, 1994). Due to this ambiguity, Brubaker (1983) argued that:

"The term, health promotion is not synonymous with disease prevention, health maintenance, primary prevention or health education. It is a term that refers to a specific area of health care" (p. 9)

Health promotion involves all of these activities and is viewed as a separate entity within health care (Spellbring, 1991). Brubaker (1983) suggested that health promotion is health care directed toward growth and improvement of well being. Similarly, Laffrey (1985) defines health promotion as any action taken toward achieving a higher level of health and well being. In a broader sense, health promotion consists of activities directed toward increasing the level of well being and actualizing the health potential of individuals, families, communities, and society (Pender, 1987, p. 4).



Pender (1987) differentiates between health promotion and disease prevention stating that health promotion is an "approach" behavior that seeks to expand positive potential for health. Whereas, prevention is considered an "avoidance" behavior that seeks to inhibit the occurrence of pathogenic insults to health and well-being. Expanding on this, King (1994) compares the goal of health promotion to prevention stating health promoting activities ultimately increase one's state of health whereas prevention is directed to maintain the status quo. According to Ardell (1986) a health promoting lifestyle is pursued because it is satisfying and enjoyable, not for the sole purpose of avoiding disease.

The document Health Promotion-Disease Prevention: Objectives for the Nation (USDHHS, 1980) defined health promotion in terms of nationally directed health services, differentiating between health promotion and prevention. The document highlights specific strategy target issues that comprise health promotion services. The document defines health promotion as a combination of health education and related organizational, environmental, and economic interventions which support behaviors that promote health. Specific target issues identified are smoking and health, misuse of alcohol and drugs, nutrition, physical fitness and exercise, and

control of stress and violent behavior.

### Prevention

This section provides an overview of the various perceptions and definitions related to the concept of prevention. The concept of prevention is closely related to health promotion. While the terms are often used interchangeable, Pender (1987) reports there are distinguishable differences in underlying motivational aspects and in goal orientations.

Historically, prevention is rooted in the biomedical model and was derived from an epidemiological perspective. Prevention is illness-oriented, directed toward high risk groups susceptible to certain disease pathology and consists of three levels; primary, secondary and tertiary (King, 1994).

According to Pender (1987) primary prevention aims to decrease the probability of specific illnesses or dysfunctions in individuals, families, and communities, including active protection against unnecessary stressors. Penders' (1987) definition of secondary prevention stresses early diagnosis and prompt intervention to halt the pathological process. The goal is to shorten the disease duration and severity, enabling the individual to regain normal function at the earliest possible point. Spellbring (1991) specifies

that as soon as the disease is detectable, early in pathogenesis, secondary prevention may be accomplished. Thus, screening procedures are considered secondary prevention (Shamansky & Clausen, 1980). Tertiary prevention applies when a disability or defect is repaired, stabilized, or irreversible. Rehabilitation is the goal at this level and aims to restore the individual to an optimum level of functioning (Shamansky & Clausen, 1980).

The document Health Promotion-Disease Prevention: Objectives for the Nation (1990) describes preventive health services as key preventive services that can be delivered by health providers. Key health status objectives targeting adults ages 25 through 64 are based on the leading causes of death in this age group which are cancer, heart disease, stroke, injuries, chronic lung disease, and liver disease. All of these are associated with risk factors related to lifestyle (USDHHS, 1990 ).

The conceptual confusion that exists regarding the concepts of health promotion and prevention has lead many to the conclusion that the two are complimentary and are not mutually exclusive (King, 1994; Pender, 1987; & Stachtchenko & Jenicek, 1990). For purposes of this study, health promotion and disease prevention are considered complimentary. Health

promotion is considered an integral part of preventive services both of which encompass strategies to improve or maintain health. Although underlying motivational mechanisms and goal orientations for health promotion and disease prevention differ, both ultimately intend to increase the level of well-being and improve the health status of individuals and groups. This study highlights the health promotion activities regarding nutrition, smoking, exercise and alcohol which are linked inextricably to the key health status objectives of preventive services which aim to reduce cancer, heart disease, stroke, injuries, chronic lung disease, and liver disease.

### Theoretical Framework

The conceptual framework for this study is based on the Interaction Model of Client Health Behavior (Cox, 1982). Permission for use of the Interaction Model of Client Health Behavior in this study was obtained (Appendix C). This model is a client-focused theoretical framework of client health behavior that recognizes the client's individuality and uniqueness in the attainment of positive health behaviors. The model addresses the elements of client-professional interaction and their role in

determining health behavior. In addition, the model guides the development of client focused interventions based on the identification of individualized health care needs (Appendix C).

The model consists of many of the variables generated by the Health Belief model, the Duchman model, the Anderson and Newman model and the Self-regulation model (Cox, 1982). Although the aforementioned models have identified variables and constructs relative to client health behavior, the models lack the ability to demonstrate practical value and relevancy to the practicing clinician. The Interaction Model of Client Health Behavior gives consideration to the multidimensional and variability of a client's behavior with the major focus on the process by which the individual client variables are transformed into health care behavior.

The object of the model is to explain relationships between client singularity, the client-provider relationship and subsequent client health behavior. The model applies to various health care settings including general clinics, hospitals, home care, and private practices. The model's greatest usefulness can be demonstrated when client personal responsibility and control of a health problem or health promotion effort is paramount. In this context, the professional health care provider becomes less of a decision

maker and more of a teacher, counselor and technician.

The elements of the model are comprised of variables regarding client singularity and client-professional interaction and it is hypothesized that health outcome is determined by the fit of these two elements (Figure 1).

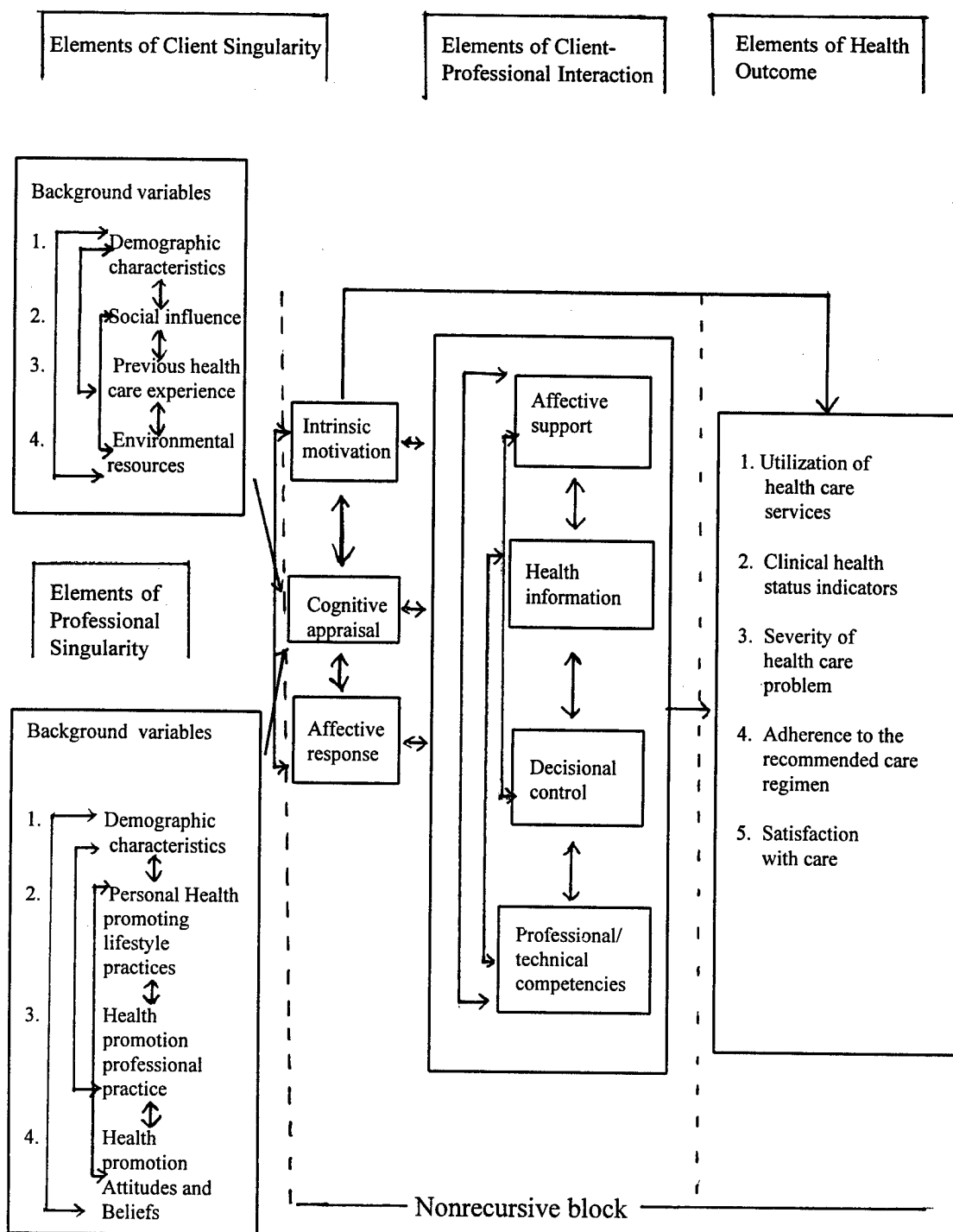


Figure 1. Interaction model of client health behavior

Adopted from Cox, 1982 (Bolton, 1996)

The elements of client singularity include background variables, motivation, cognitive appraisal and affective response to health concern. The model suggests that intervention is based on an assessment of the expression and interaction of the multiple variables. The components of client-professional interaction include affective support, decisional control, health care, information and professional/technical competencies of the provider. It is postulated that the strength of these components will vary according to the client's singularity and the health care need and that this interaction has a major impact on health care behavior. Inherent within the model is a continuous reciprocal interaction between aspects of client singularity, the interaction and health care outcomes.

The elements of Health Outcome are: (1) utilization of health care services; (2) clinical health status indicators; (3) severity of health care problem; (4) adherence to the recommended care regimen; and (5) satisfaction with care. Health behaviors that are considered positive refer to those conditions that maintain or promote the client's health state. Negative health behaviors are those that place the client at risk thereby decreasing the capacity for self actualization.



The application of the Interaction Model of Client Health Behavior in nursing research is threefold. It is suitable to explore and document nursing intervention, investigate the role of self care practices and examine the efficacy of holistic client-centered approaches. The model is geared to the expanding nursing role in health promotion and preventive practice with emphasis on the process of care which is determined by the specific characteristics and conditions within the client. The formulation of attitudes, beliefs and practices of health promotion among clients is directly tied to the motivation variable described in the model which recognizes choice, desire and the need for competency and self determinism. In addition, background learning needs and emotional needs directly influence clients views and practices of health promotion activities. Use of this model to explore the attitudes, beliefs and practices of health promotion/preventive practice among health care professionals draws from the context of the elements described in client-professional interaction, specifically in the provision of health information component. Nurses, as providers of health information are responsible for providing the right amount of information, ensuring that the information is meaningful and assessing client's ability to process information. In addition, the client-provider interaction is addressed

in the Professional-technical competencies component which suggests that the need for information will vary according to the client's health state and ability to process the information. Moreover, often, the acute care needs of the patient takes precedence over health promotion\prevention needs during the initial phase of hospitalization. Within the acute care setting, nurses attitudes, beliefs and practices of health promotion/preventive care may be related to the populations' increased need for technical intervention and the nurses perception of client's ability to process information.

This researcher includes in the model elements of professional singularity that impact client professional interaction. It takes into account the background variables of the professional nurse which include demographics, personal health promoting lifestyle practices, health promotion attitudes and beliefs, and health promotion professional practice. Nurses' personal behaviors, attitudes and beliefs are directly related to intrinsic motivation, cognitive appraisal and affective response regarding the delivery of health promotion and preventive services. Ideally these elements of both client and professional singularity interact in the acute care setting to maximize nurse competence and client compliance toward healthy living.

## Empirical Review of Literature

The review of the empirical literature is divided into four categories:

- 1) Personal health promoting lifestyle behaviors; 2) health promotion/prevention attitudes and beliefs among nurses and physicians; 3) health promotion/prevention practice among nurses and physicians; and 4) nurses as role models.

### Health Promoting Lifestyle Behaviors

Few published studies have investigated the health promoting lifestyle behaviors of nurses. One recent study utilizing the Health Promoting Lifestyle Profile (Walker, 1987) was conducted by Chen et al., (1994) which investigated the health promoting lifestyles of public health nurses in China. The findings of Chens' (1994) study are not accessible to this researcher. The original Health Promoting Lifestyle Profile, devised by Walker, Sechrist and Pender (1987) has been used extensively in studies investigating women, university students, elderly clients, cancer patients, and various worksite groups for purposes of identifying determinants related to health promoting lifestyle behaviors (Duffy, 1988; Oleckno & Blacconiere, 1990; Foster, 1992; Frank-Stromberg et al., 1990; Lusk et al.,

1995). For purposes of this study, the empirical review of the literature will address one study which investigated the health promoting lifestyle behaviors of blue collar, skilled trade, and white collar workers (Lusk, et al., 1995). Findings regarding the health promoting lifestyle behaviors of the group of automotive plant workers will allow for meaningful comparison to nurses' health promoting lifestyle behaviors.

Lusk et al., (1995) investigated the health promoting lifestyles of blue collar, skilled trade, and white collar workers in a Midwestern automotive components plant. A convenience sample of 638 workers completed the Health Promoting Lifestyle Profile (HPLP, 1987) as part of a larger written questionnaire designed to investigate differences in health promoting behaviors among worker categories and demographic variables. Overall, the participation rate was 14% and the worker categories were as follows: 10% blue collar workers, n= 314; 23% of skilled trade workers, n= 209; and 26% of white collar workers, n=115. Analysis of this study included only white and African American workers. The 638 workers averaged 42 years of age, with a range of 18 to 64 years. For analysis, education levels were collapsed into three categories: a) high school or less (35%); b) some college or trade school (48%); and c) college degree or higher (19%).

The instruments used in this descriptive correlational study were the HPLP (1987) instrument and a sociodemographic survey. The 1987 version of the HPLP was used to measure health promoting behaviors categorized into 6 subscales which measured 6 dimensions of health: a) self-actualization, having a sense of purpose and self-awareness; b) health responsibility, accepting responsibility for one's health and acting accordingly; c) exercise, following regular exercise patterns; d) nutrition, making healthy food choices and patterns; e) interpersonal support, maintaining close relationships; and f) stress management, recognizing stress and acting to control it. For this study, alpha reliability was .93 for the HPLP and .73 to .89 for the subscales.

Descriptive statistics were used to examine and describe the health promoting lifestyle of the group. The means and ranges for the HPLP and its' subscales were: Self-actualization 3.04 (possible range 1.69 to 4.00), Health responsibility 2.24 (possible range 1.10 to 4.00), Exercise 2.18 (possible range 1.00 to 4.00), Nutrition 2.47 (possible range 1.00 to 4.00), Interpersonal support 2.86 (possible range 1.14 to 4.00), Stress management 2.49 (possible range 1.29 to 4.00) and HPLP total score 2.6 (possible range 1.44 to 3.96). Among the findings of this study, analysis revealed younger

workers had significantly higher scores than the other groups on self-actualization, exercise, and interpersonal support,  $F = 3.05$  ( $df = 2, 629$ ) to  $7.48$ ,  $p = .05$  to  $.001$ . Also, the effect of gender was examined using a t-test and significant differences were found in mean scores for total health-promoting lifestyle and the health responsibility, exercise, and interpersonal support subscales ( $t = 1.96$  to  $2.69$ ,  $p = .05$  to  $.01$ ). Results revealed women scored higher on health responsibility, exercise, and interpersonal support subscales. According to Lusk et al., (1995) the differences in the subscales by gender are consistent with expectations from the literature, with women reported significantly higher in the areas of health responsibility, exercise (Walker et al., 1988) and interpersonal support (Weitzel, 1989). Individual subscale scores reflecting the health promoting lifestyle behaviors of women in this study are not available for comparison to women in other studies. Additional findings revealed the greatest differences in lifestyle correspond to educational level. Higher education consistently predicted higher mean scores on the HPLP and its' subscales,  $F = 4.53$  to  $15.88$  ( $df = 2, 633$ ),  $p = .01$  to  $.001$ . Subjects with college degrees had higher scores than the other groups on health responsibility, exercise, nutrition and stress management. Likewise, subjects with an education of high school or less

had lower scores than the other groups on self actualization, interpersonal support and health promoting lifestyle. Individual subscale scores of health promoting lifestyle behaviors among college graduates are not available for comparison to college graduates in other studies.

### Health promotion and prevention attitudes, beliefs, and practices

To date, research regarding health promotion and prevention attitudes, beliefs and practices has focused on nursing and medical staff working in primary care settings within the community (Calabrese et al., 1991; Carretta, 1990; Coulter, 1991; Valente et al., 1986; Willford 1992). Other study settings include medical school environments and community hospital residency programs (Elliot et al., 1994; Patterson et al., 1989). The literature on health promotion/preventive within acute care hospital settings is scant, most of which has been done in England (Coulter, 1991; Gorin, 1992; Gott & O'Brien, 1990; Latter, 1993; McBride, 1994).

The review of the empirical literature regarding attitudes, beliefs and practices is divided into two categories: (1) health promotion/prevention attitudes and beliefs among nurses and physicians and (2) health promotion/preventive practice among nurses and physicians.

### Health Promotion and Prevention Attitudes and Beliefs

Studies looking at nurses attitudes and beliefs reveal the perception that health education activities are a valued component of the nurses role (McBride, 1994, & Gorin, 1992). Latter et al. (1992) conducted a cross-sectional study of 142 senior nurses working on acute wards in England. In efforts to find factors that inhibit or facilitate the nurses role in health education, the study focused on nurses perceptions of health promotion and preventive practice as an initial stage of a larger 2-year study. Results revealed 52% (n=69) of the nurse managers perceive health education activities in general to be a feature of practice on the majority of acute wards. The senior nurse managers' eagerness to participate in the study (response rate 73%) portrayed a positive attitude toward health promotion activities. The author presents a positive attitude as a possible limitation to the study as this view may have biased the nurses to overestimate the degree to which health promotion practices are delivered. In addition, attitudes related to the terms health education and health promotion were characterized by an illness-preventive focus with emphasis on aspects of physical health.



Hospital nurses' attitudes to health promotion education were studied by McBride (1994). Findings revealed 81.1% of nurses felt health education is not guilt-inducing or victim-blaming toward patients. A total of 23.5% of nurses felt patients view health promotions as dull and boring and 10.3% of the nurses admitted to finding health promotion activities dull and boring for themselves. In spite of this, a majority (93.7%) thought that nurses were ideally placed to give health education to patients.

A similar study by Gorin (1992) examined 505 student nurses attitudes and beliefs toward health promotion. This was a cross-sectional survey of 13 participating schools of nursing in the New York metropolitan area during the 1989-1990 school year. Respondents rated 23 health promotion practices on a Likert scale and results were compared to other health care providers, including physicians, dieticians and pharmacists. The findings revealed strong beliefs and substantial interest in health promotion among student nurses. The results were similar to those found for the other health care providers. Agreement among raters ( $w = .259$ ) was statistically significant ( $p < .0000$ ). The researcher postulated that the nurses attitudes were associated with the nurses role as health promoter and that positive nurse attitudes and beliefs directly impact alterations in patient behavior.

Similar studies revealed positive attitudes toward prevention among physicians (Coulter, 1991; Elliot, 1994). Coulter (1991) surveyed 1,014 general practitioners in the Oxford region of England. Included in the questionnaire were specific items regarding views on prevention and health promotion. Overall, the respondents revealed a positive attitude toward their role in preventive care and health promotion. Seventy two percent of the general practitioners strongly agreed that they are ideally placed to give health education. Interestingly, 41.9% of the respondents felt nurses are more appropriate people to promote health. A majority of physicians disagreed with negative statements about the value of lifestyle advice. Further results revealed 78.6% of the respondents disagreed with the statement that health education is boring and 82% disagreed with the statement that health promotion education is guilt-inducing.

Elliott (1994) surveyed medical school faculty to investigate attitudes and practices of health promotion and early disease detection. This observational study included self report survey data that was collected with a confidential questionnaire. In general, faculty had moderate to good agreement between their beliefs concerning lifestyles which promotes health and their own reported behaviors. A correlation coefficient for

continuous variables and a Kappa statistic for categorical variables were used to analyze the data. The correlation between behavior and belief regarding abstaining from smoking was as follows: .26 ( $p < .005$ ); wearing a seatbelt, .50 ( $p < .005$ ); exercise moderately, .37 ( $p < .005$ ); exercise vigorously, .21 ( $p < .005$ ); and limit dietary fat, .37 ( $p < .005$ ). It was postulated that these health care providers health promotion beliefs relate not only to their personal habits, but to their patient care practices as well.

### Health promotion and Prevention Practices

Although the health promotion/prevention attitudes and beliefs among nurses and physicians are positive, actual in-hospital practice is oriented toward illness-prevention and meeting the physical needs of the patient (Coulter, 1991; Elliot, 1994; Latter, 1993; McBride, 1994;).

McBride's survey of 225 hospital nurses examined nurses' practice in interviewing patients and systematically recording basic data. Ninety percent of the nurses reported questioning patients regarding smoking history, 67% questioned alcohol consumption, 60% questioned exercise issues, and 91% addressed dietary habits. Compared to the practice of

interviewing patients, nurses scored lowest for consistency in recording, suggesting that nurses are not recording health promotion/preventive practice as part of routine practice.

The degree to which hospital nurses are actually involved in the practice of health education was also studied by Latter (1993). Charge nurses (n=132) responded to the question of whether or not the nurses were engaged in health education and health promotion. 52% (n=69) stated unequivocally that nurses were engaged in health education. The focus of perceived involvement was in patient education (n=104) and information giving (n=60). Similarly, physicians health promotion practices were revealed to be opportunistic in nature in which health promotion issues were addressed depending on the individual patient symptom or situation (Calabrese, 1991; Coulter, 1991). Coulter (1991) found 63.5% of general practitioners addressed smoking in most adult consultations, fewer (25.9%) inquired about drinking, 11.6% discussed diet, followed by 10.8% that discussed exercise. Calabrese (1991) discovered practice inconsistencies as well. Physicians (N=301) from Northeastern Ohio were surveyed to assess their attitudes, beliefs and practices regarding preventive education with particular reference to human immunodeficiency virus (HIV). The

physicians self-report questionnaire revealed the frequency in which the physician routinely obtained information from new patients. Results revealed personal histories regarding smoking and alcohol were routinely taken and recorded by greater than 73% of the respondents. Fewer respondents routinely obtained information regarding exercise (35%) and diet (36.4%). Family history (84.5%) and smoking history (81.1%) information were obtained the most consistently.

Studies cited in this review of literature relied on information obtained through self-report. The degree to which data reflects current practice can not be determined and subsequent stages of one 2-year study (Latter, 1992) will allow comparison of nurse perceptions with observed practice. To date, findings of subsequent stages of the 2 year study (Latter, 1992) are not published. Schofield (1991) admits limitations to self-report methods which include the likelihood of respondents to overestimate preventive care services provided in general practice. Additionally, underestimates of activity can occur since it may exclude those activities that are not represented in the precoded options.

### Nurses as Role Models

As professionals, nurses are in a critical position to serve as role models for positive health behaviors (Soeken, et al, 1989). Clarke (1991) contends that "...there is pressure for nurses to conform to a certain 'healthy' lifestyle/image in order to maintain a degree of credibility with their clients" (p. 1179). Pender (1987) supports the idea that health promotion for health care providers can enhance the role modeling capabilities for health care professionals. Pender (1987) describes the role of the nurse in prevention and health promotion as that of an expert consultant in which the nurse/client relationship is based on education and support. The impact of nurse educators in affecting change is partially dependent on the personal lifestyle habits and attitudes of the nurse educator toward health promotion and preventive practice. Few studies have been done correlating nurses' personal lifestyle with professional practice. One study revealed that nonsmoking nurses were more likely than smoking nurses to counsel clients against smoking (Love & Olsen, 1985). The study pointed out that the nonsmoking nurses agreed that smoking was a major cause of cancer and other health problems and thus, the nonsmoking nurses were more likely to incorporate this belief into their professional practice. Another study linking

specific preventive behavior of nurses to professional practice highlighted smoking behaviors among nurses (Becker, et al, 1986). This study found that nurses who smoke hold attitudes which reduce their effectiveness in helping clients to stop smoking.

Lastly, studies have been conducted to address the degree to which nurses incorporate prevention strategies into their own personal lifestyle. Soeken (1989) examined nursing students' attitudes and compliance toward preventive behavior and Rausch (1987) examined the interrelationships among smoking behavior and preventive lifestyle practices among nurses. Soeken (1989) found that when compared to a national sample of females in the same age range, nursing students were found to be significantly less compliant for 12 of 19 preventive lifestyle behaviors and more compliant for only three behaviors. The nurses reported significantly less smoking than the general population (17% vs 29%) and increased participation in activities to reduce stress (85% vs 75%). In addition, seat belt usage was also higher among nurses (87% vs 50%). Preventive behaviors in which nurses were less compliant included nutritional behaviors (e.g. avoiding fat and cholesterol), lifestyle items (e.g. exercising regularly), and safety factors (e.g. avoiding speeding). Despite the low rate of compliance among

nurses, the subjects indicated they consider a majority of the preventive lifestyle behaviors to be very important in helping people to live a long, healthy life. The question arises as to how effective is the nurse educator who believes that health behaviors are important and yet does not model them. A similar study was conducted by Rausch (1987) which revealed a positive correlation between non-smoking and eating breakfast and reduced coffee consumption. The interrelationships among lifestyle behaviors described by Rausch (1987) provides a framework for investigating interrelationships among nurses attitudes, beliefs and professional practices regarding health promotion and prevention.

### Summary

The terms health promotion and prevention are difficult to define and differentiate. For the purposes of this study they are considered complimentary and are not mutually exclusive. The Interaction Model of client health behavior provides the conceptual framework for this study. The review of the literature is scant regarding studies involving nurses' health promoting lifestyle behaviors. Health promotion attitudes, beliefs and practices in the acute care setting were addressed in the empirical review of



the literature. Nurses value the role of health promotion and preventive practice and health education activities in general are considered to be within the staff nurses' scope of practice. Nurses' attitudes and beliefs regarding health promotion and disease prevention in the inpatient setting are generally positive. Nurses' professional health promotion practices regarding smoking, alcohol, exercise, and diet/obesity have been researched in the McBride study yet findings are vague. Other studies addressing health promotion practice issues of nurses have focused on measuring nurses involvement in patient education, information giving and advice giving yet these studies fail to quantify the degree to which nurses engage in these activities as they pertain to smoking, exercise, alcohol, and nutrition. Included in the review of the empirical literature were studies that addressed the impact of the nurse as a role model.

Physician studies reveal positive attitudes and beliefs regarding health promotion in spite of reported practice inconsistencies. In general, a majority of physicians view health-promoting behaviors related to smoking, diet, alcohol and exercise as important for all patients. However, few physician studies address the relationship between personal health promoting behaviors and professional practice. Findings in physician

studies related to health promotion/preventive practice were more specific in terms of consultative activities pertaining to smoking, alcohol, diet and exercise. Practice inconsistencies were noted in physician studies with obtaining patient information regarding diet and exercise being weak areas.

### III. METHODOLOGY

The purpose of this study is to: a) examine and describe the personal health promoting lifestyle behaviors of a group of nurses working on acute care wards in a military treatment facility; b) identify nurses attitudes and beliefs about health promotion/prevention activities in professional nursing practice; and c) examine and describe the professional health promotion practices of nurses within the inpatient setting.

This chapter will describe the methodological components of the study including the research design, setting, population, sampling plan, ethical considerations for human subject protection, instrument, procedures and data analysis.

#### Research Design

This is a descriptive, correlational, non-experimental study. According to Burns & Grove (1993) the benefits of this design include facilitating the identification of many interrelationships in a situation in a

short period of time. From this, a hypothesis can be developed for later studies. A limitation of the correlational design is that causality by correlation cannot be determined. This study examined one group in terms of two or more variables, therefore, relationships were examined.

Professional military and civilian nurses were surveyed to measure personal behaviors, attitudes, beliefs and practices of health promotion practices.

This study is a systematic replication of the 1994 McBride study. Burns & Grove (1993) describes systematic replication as a method of study that is based on a similar problem statement, however it is conducted under distinctly new conditions to formulate new means to verify the first investigator's findings.

### Setting

The study was conducted at a 301 bed acute care military Medical Center located in southwestern Ohio. The investigator chose this facility because it is a regional medical center within the Air Force. In addition, as an Air Force nurse, this investigator is directed to conduct her graduate thesis in a military hospital setting. This acute care facility incorporates primary nursing care which is based on a holistic approach to care and

utilizes the nursing process in clinical practice. Permission for professional nurses on noncritical care adult wards to participate was obtained from the medical center research committee (Appendix D).

### Population

The professional nursing staff in adult, acute care wards located within the Medical Center is the target population from which the convenience sample was drawn. One hundred registered nurses comprised of military ( $n=94$ ) and civilian nurses ( $n=6$ ) were eligible to participate. Forty-nine nurses chose to complete the questionnaire. Demographics of the nurses include gender, age, experience level, and education level (Appendix E).

### Sampling Plan

The convenience sample for this study consisted of those military and civilian nurses working in acute care inpatient units in a large military hospital in the United States who chose to participate. The convenience sample limits the potential representativeness of the sample leading to possible sample biases. The participants were limited to professional nurses

working on noncritical adult wards. Nurses working with children were excluded because the Health Promotion in Hospital questionnaire is directed to health promotion issues pertaining to adults. Critical care nurses and emergency room nurses were excluded because of the emergent nature of care given in these areas. Nursing care priorities in the critical care and emergency setting limit the practice of health promotion and preventive practice.

The sample size was based on power analysis which was performed for each research question in the study. The components of a power analysis are related to the level of significance and the statistical tests to be used (Burns & Grove, 1993). It was not possible to obtain the expected sample size, thus the study analysis was redesigned to ensure an adequate sample for the planned analysis (Burns & Grove, 1993). Desired sample size was 70-120 subjects. The justification for this sample size was based on a power analysis of each original research question. The alpha level used for the sample in this study was set at the .05 level.

### Ethical Considerations/Human subjects protection

Burns and Grove (1993) cite the human rights that require protection in research as (1) self-determination, (2) privacy, (3) anonymity and confidentiality, (4) fair treatment, and (5) protection from discomfort and harm (American Nurses' Association [ANA], 1976, 1985; American Psychological Association [APA], 1982, p. 94). In regard to self determination prospective subjects were treated as autonomous agents by informing them about the study and allowing them to volunteer to choose to participate or not participate (Appendix F). Subjects were free from constraint, coercion, or undue influence of any kind to participate in the study. Subjects were assured confidentiality and protection. Subjects were informed of the purpose of the study, how the findings will be reported, the identity of the investigator and the right to refuse to participate in the cover letter of the questionnaire. Consent was implied when the subjects completed the questionnaire and place it in the collection box. Subjects were instructed not to write their names on the questionnaire. Subjects had the opportunity to complete the questionnaire privately. Confidentiality was ensured as specific individual demographic data is available only to the author. Data collected is group analyzed and individual data will not be

disclosed. There are no positive or negative effects expected on research subjects from participating in this study. Subjects were required to provide demographic information including age, gender, basic nursing education, highest nursing degree attained, area of clinical expertise, years experience as a nurse. The description of these variables provided further knowledge and insight about health care professionals providing health promotion teaching. Permission was obtained from the Wright State University Human Subjects Review committee (Appendix G) and the military medical center Nursing Research Committee (Appendix D).

### Research Instruments

Three questionnaires were administered to the nurse participants. The first was the **Health-Promoting Lifestyle Profile II** (Walker, Sechrist, & Pender, 1995) which was used to analyze and describe the personal health habits of nurses. The questionnaire consists of 52 statements about present personal health habits whereby subjects indicated the frequency in which they engage in each behavior (Appendix A).



Scoring- The **Health-Promoting Lifestyle Profile II** was selected to measure personal health habits of nurses. Permission was obtained to use this instrument from Susan Noble Walker (Appendix I). The 52 statement items are scored as *Never (N)=1*; *Sometimes (S) =2*; *Often (O) = 3*; and, *Routinely (R)=4*. The instrument categories include questions pertaining to health promoting lifestyle (# 1-52), health responsibility (# 3, 9, 15, 21, 27, 33, 39, 45, 51), physical activity (# 4, 10, 16, 22, 28, 34, 40, 46), nutrition (# 2, 8, 14, 20, 26, 32, 38, 44, 50), spiritual growth (# 6, 12, 18, 24, 30, 36, 42, 48, 52), interpersonal relations (# 1, 7, 13, 19, 25, 31, 37, 43, 49), and stress management (# 5, 11, 17, 23, 29, 35, 41, 47). The HPLP II was scored by obtaining the overall mean for all 52 items on the total scale; each subscale was scored in a similar manner. The instrument and scoring instructions are located in Appendix A.

History of instrument use- The **Health-Promoting Lifestyle II** is a modification of the original Health-Promoting Lifestyle Profile of 1987. The original questionnaire has been used extensively since 1987 and validity was established by an item analysis conducted on the original instrument pool of 101 items, followed by factor analysis of the refined 48

item pool. Reliability measures were conducted on the completed instrument. An alpha reliability coefficient of the total scale of 0.923 and alpha coefficient for the subscales ranging from 0.702 to 0.904 with stress management the lowest and self actualization the highest (Walker et al., 1987). According to Walker et al., (1995), the original instrument was revised to more accurately reflect current literature and practice and to achieve balance among the subscales.

Validity and Reliability- Based on Walkers' et al., (1995) analysis, Cronbach's alphas for the **Health-Promoting Lifestyle II** are as follows: Health responsibility (.861), physical activity (.850), nutrition (.800), spiritual growth (.864), interpersonal relations (.872), stress management (.793), Total HPLP II (.943). Walker 1995 states that a manuscript describing the validity and reliability of the revised instrument is in preparation and is not available for publication (Appendix H).

The second questionnaire, a modified version of a survey entitled **Health Promotion in Hospital Practice** was administered to nurses (McBride, 1994). Self report was used to determine the pattern of attitudes,

beliefs and practices of health promotion and preventive care. The questionnaire asked a number of questions about identification and recording of risk factors, about advice offered to patients, and about the respondents' views on prevention and health promotion. Most questions offered a range of precoded options from which they could choose all that applied. The multiple choice format focused on concepts regarding attitudes, beliefs, and elements of professional practice pertaining to smoking, alcohol, diet/ nutrition, and exercise among inpatients (Appendix B).

Study limitations exist due to the use of a structured questionnaire which may have resulted in underestimated activities as the responses are limited to precoded options. The possibility of including open-ended questions may have strengthened this weakness, however, there is no mechanism for validating qualitative responses. Paradoxically, due to the nature of the survey, participants may overestimate the levels of health promotion and preventive care they provide (Coulter & Schofield, 1991).

### Scoring

The modified version of the **Health Promotion in Hospital Practice Questionnaire** was selected to measure attitudes, beliefs and practices of hospital nurses. Permission was obtained to use the instrument from both Theo Schofield and Anita McBride (Appendix H).

The instrument has seven items with closed-ended responses of demographic data. It has eight items that offer "check all that apply" responses related to the patient education topics of smoking, alcohol, diet/nutrition and exercise. Scores were calculated as the frequency of the number of checks per question and per subject (i.e., smoking, alcohol, diet/nutrition, and exercise). Sixteen questions (# 1, #3, #5, #6, #7, #9, #11, #12, #13, #15, #17, #18, #19, #21, #23, #24) are closed-ended responses of *never, rarely {<20%}, sometimes {20-49%}, often {50-69%}, usually {70-89%}, always {90-100%}*. These items reflect frequency of recording subjective data regarding smoking, alcohol, diet/nutrition and exercise. Sixteen items (a through p) are included in one question # 25. The closed-ended responses relate to nurses attitudes of health promotion and preventive practice. These items are rated as: *Agree strongly, agree somewhat, disagree somewhat, disagree strongly*. Scores were not assigned

to these responses. There are 4 items (included in question # 26) related to the importance of lifestyle practices (smoking, weight, exercise, diet/nutrition) contributing to an individuals health status. These have closed-ended responses of *very important, moderately important, not important, uncertain*. Scores were not assigned to these responses. Four items related to the perceived effectiveness of advice giving activities in promoting health in question # 27. These have closed-ended responses of *probably effective, probably ineffective, evidence inconclusive, no opinion*. Scores were not assigned to these responses. This researcher elected not to score the attitude and belief related questions because the data was analyzed solely for descriptive purposes. The last question #28 provided an opportunity for open-ended responses pertaining to comments regarding health promotion in the hospital.

**History of Instrument use- The **Health Promotion in Hospital Practice****

questionnaire was designed and piloted with 10 general practitioners in England then mailed in 1987 to 1291 general practitioners in the Coulter and Schofield study. Modifications were made for its use with nurse subjects and it was piloted prior to its use in the McBride study. At that

time, no changes were made to the format (McBride, 1994).

Validity and reliability- "Reliability is concerned with how consistently the measurement technique measures the concept of interest" (Burns and Grove, 1993 p. 339). Reliability of this instrument has not been determined due to the opinion-oriented nature of the instrument (T. Schofield, personal communication, May 12, 1995). This does not preclude, however, the necessity for conducting reliability testing on the instrument.

Validity is a "determination of the extent to which the instrument actually reflects the abstract construct being examined" (Burns, 1993 p. 342). Although the tool was originally developed for use with physicians, validity in terms of nursing knowledge and practice has not been established. For purposes of this study, content validity was evaluated by three nurse experts in the field of Health Promotion\Prevention in order to determine content representativeness or content relevance of the elements/items of the instrument. According to Lynn (1986), the process by which content validity should be determined includes a rigorous "process to determine and quantify content validity" (p. 382).

The process for attempting to establish content validity for this study was by no means rigorous. For purposes of this study the attempt was to present a standardized approach to determine content validity using Lynn's (1986) methods of quantifying individual items within the instrument. The instrument was previously developed and permission was obtained to revise the instrument (Appendix H). The process of determining content validity involved review and analysis by three nurse experts to ascertain content validity of individual items and of the entire instrument. The number of experts was derived by those who were accessible and agreeable to participate. The three nurse experts were selected based on their knowledge and expertise in the field of health promotion and prevention (Appendix I).

A structured procedure for evaluating content validity was given to the experts along with the abstract, research questions and an explanation of the content domain relative to this study. Specific instructions were included for rating the content relevance of the items using a four point ordinal rating scale, where "one" connoted an irrelevant item and "four" an extremely relevant item. In addition to judging each item, the experts identified any areas that have been omitted from the instrument that should be included. The experts input provided valuable insight regarding the

content validity of the instrument items and revisions were made according to each experts' input. Overall, the experts agreed that most of the items were relevant and succinct. Minor alterations were needed for some items such as word changes and format changes within the instrument. Some items were rated as not relevant and were deleted and questions were added to the instrument to sufficiently measure nursing practice activities.

Due to the scope of this study, adherence to the rigorous quantification procedures outlined by Lynn (1986) was not feasible. The Index of Content Validity was not calculated and therefore, according to Lynn (1986) content validity has not been determined. Face validity has been determined by experts, in that the elements/items of the instrument represent the content domain that was measured. Following revisions, the modified version of the Health Promotion in Hospital Questionnaire was submitted for Thesis committee approval and Wright State University IRB approval prior to surveying the nurses (Appendix I).

The third questionnaire was entitled **Nurse Demographic Data**. The data obtained from this questionnaire pertained to age, gender, basic nursing program, highest degree obtained in nursing, number of years in nursing practice, area of clinical expertise, and employment status (Appendix E).



### Methods/Procedures

Administration- Following approval and permission from WSU IRB and the military medical center Nursing Research committee (Appendix G), this researcher conducted a meeting with the charge nurses of each unit to coordinate dissemination of the questionnaires. This researcher did not speak with or interact with the nurse participants. A questionnaire with an introductory cover letter was placed in the unit mailboxes of each noncritical care, nonpediatric professional nurse. Charge nurses requested that the subjects complete the questionnaire and place it in a box in a predesignated room conveniently located on the work unit. Subjects were given two weeks to complete the questionnaires. Signs were posted on each of the participating units reminding potential subjects to complete the questionnaire (Appendix J). At the end of the two week deadline, 49 participants had responded. The researcher collected and maintained the questionnaires and demographic sheets in a secured file box. Group results were sent to interested participants who addressed an envelope that was provided and placed it next to the box containing the completed forms.

### Data Analysis

The purpose of this study was to: a) examine and describe the personal health promoting lifestyle behaviors of a group of nurses working on acute care wards in a military treatment facility; b) identify nurses attitudes and beliefs about health promotion activities in professional nursing practice; and c) examine and describe the professional health promotion practices of nurses within the inpatient setting. The research questions of concern were answered using descriptive statistical analysis and regression analysis. The Wright State University Statistical Center was consulted for statistical testing and data analysis. The following is a list of research questions and the statistical analysis conducted for each question.

### Research Questions

#### **1. What are the demographics of the sample?**

Description statistics were used to calculate the frequency and percentage scores for each demographic data category. These calculations were used to describe the demographic profile of the sample.

**2. What are the personal health promoting lifestyle behaviors specific to this group of nurses?**

The mean and standard deviation of each subscale score of the HPLP II was calculated and compared with the highest possible score for each subscale. The overall score was calculated by summing the means of the six subscales. The overall score was compared with the highest overall score possible.

**3. What are the health promotion attitudes and beliefs present in nurses working in military hospitals?**

Descriptive statistics were used to calculate the frequency and percentage of each item in questions # 25, #26, # 27 in the modified version of the Health Promotion in Hospital Practice instrument in order to assess attitudes and beliefs.

**4. To what degree are nurses providing health education services regarding smoking, alcohol, exercise, and nutrition?**

Descriptive statistics were used to calculate frequencies and percentages for each part of questions #1 through # 24 on the modified version of the Health Promotion in Hospital Practice instrument. Scores were also calculated as the frequency of the number of checks per question

and per subject (i.e. smoking, alcohol, exercise, and diet/nutrition).

Excluded in the counting of checks were the 'none of these' categories.

Responses of 'often', 'usually', and 'always' for questions #1, #3, #5, #6, #7, #11, #12, #13, #15, #17, #18, #19, #21, #23, and #24 will be included as one point each.

**5. Is there a relationship between the individual subscale scores or the overall score of the Health Promoting Lifestyle Profile II and the age, gender, educational level, number of years in nursing practice, and area of clinical expertise.**

Multivariate regression analysis was conducted using demographic questions #1, #2, #4, #5, and #6 as independent variables. The dependent variable was the overall score of the HPLP II. Individual subscale scores were not analyzed due to the small sample size.

**6. Is there a relationship between the overall score of the HPLP II and reported health education services regarding smoking, alcohol, exercise and nutrition among nurses working in the acute care setting in a military hospital?**

Multivariate regression analysis was used to determine whether a relationship exists between the overall score of the HPLP II and reported

health promotion practices among nurse. The scores pertaining to health education services provided by nurses (Research Question #4) from the modified version of the Health Promotion in Hospital Practice instrument were used as the dependent variables. The overall score from the HPLP II was used as the independent variable.

**7. What are the additional comments made regarding health promotions among nurses working in a military hospital?**

Based on the qualitative data derived from the nurses responses, themes were described.

**Summary**

This chapter focused on the methodology that was used in this research study. The convenience sample of hospital nurses was obtained from a large military hospital in an urban Midwestern region. The Health Promoting Lifestyle Profile II, modified version of the Health Promotion in Hospital Practice instrument, and demographic questions from the Nurse Demographic Data survey were the instruments used to collect data regarding the health promoting behaviors, attitudes/beliefs and practices of the sample. Descriptive statistics and multiple regression were used to analyze the data collected.

#### IV. DATA ANALYSIS

The purpose of this chapter is to present the data regarding the health promoting lifestyle behaviors, health promotion attitudes and beliefs and professional health promotion practices among a group of nurses. The data were analyzed using descriptive statistics and regression analysis inferential statistics. The Health Promoting Lifestyle Profile II (Walker, Sechrist & Pender, 1995), the modified version of the Health Promotion in Hospital Practice instrument and the sociodemographic survey were the instruments used for data collection. The data is organized and presented according to the seven research questions. The computer analysis was provided by the Wright State University Statistical Department. The SAS Version 6.08 was used to derive the statistics.

##### Research Question One

##### **What are the demographics of the sample?**

Sociodemographic data pertaining to age, gender, basic nursing

degree, highest degree obtained, number of years in nursing practice, area of clinical expertise and employment status were derived from the sociodemographic survey. The ages of the participants and number of years in nursing practice were calculated as continuous variables with the mean, median, range and standard deviation calculated. The gender, educational level, area of clinical expertise and employment status were expressed as discrete variables with the frequencies and percentage scores calculated. A summary of the demographic data is found in Table 1.

Table 1

Sociodemographic characteristics

Variable	Frequency	Percentage
Gender		
Male	5	10.2%
Female	44	89.8%
Basic Nursing Program		
Associate/Diploma	2	4.1%
BSN	47	95.9%
Highest Nursing Degree		
BSN	44	89.8%
MSN	5	10.2%
Current Clinical Area		
General surgical	17	34.7%
Obstetric/Gynecology	12	24.5%
Medicine/Oncology	20	40.8%
Employment status		
Active duty	49	100.0%

Note: Age: mean =  $28.9 \pm 6.5$  years (range = 22-46 years)

Number of years in nursing practice:

mean =  $4.5 \pm 5.1$  years (range = 1-21 years)



The sample consisted of 49 nurses. The age range was from 22 to 46 years of age. The mean age was 28.9 years with a standard deviation of 6.5 years. The participants were predominantly female (89.8%) and 10.2% were male. Educational level was reported by all participants with 4.1% obtaining an Associated degree or Diploma prior to obtaining a Bachelor's degree. The remaining subjects (95.9%) reported obtaining a Bachelor's of Science degree as their basic nursing educational preparation. A majority (89.8%) of the participants reported having a Bachelor's degree as their highest nursing degree and the remaining (10.2%) were Masters' prepared. Within the sample, the majority of the nurses described their area of clinical expertise as medical/oncology (40.8%). General surgical nurses comprised 34.7% of the sample with the least number being obstetrical/gynecological nurses (24.5%). Employment status referred to active duty, civilian or reservist status. All of the participants (100%) reported being active duty military nurses. Six civilian nurses were among the eligible participants for the study yet they did not complete the survey.

## Research Question Two

### **What are the personal health promoting lifestyle behaviors specific to this group of nurses?**

The HPLP II (Walker, Sechrist & Pender, 1995) was utilized to assess six dimensions of a health promoting lifestyle and the overall health promoting lifestyle among a sample of 49 nurses. The six dimensions assessed were health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. Respondents selected from a 4 point Likert-type scale (1 = never, 2 = sometimes, 3 = often, and 4 = routinely). Responses to each item reflected one of the six dimensions. The higher the score within each dimension, the stronger the respondent's health practices within that domain. The dimensions, expressed as subscales, have differing highest possible scores due to an unequal number of items. The overall Health Promoting Lifestyle score represents the summation of the weighted means of the six subscales. The weighted means were calculated by multiplying each subscale mean with the number of items in the individual subscale. The highest possible overall score is 208 with the lowest being 52. Table 2 presents the weighted mean scores, and standard deviations computed with the highest possible scores for each

subscale and the overall profile.

Table 2

Comparisons of Weighted Means and Highest Possible Scores of Health  
Promoting Lifestyle Practices

Variable	Mean	$\pm$ SD	Highest Possible Score
Health Responsibility	26.1	4.5	36
Physical Activity	20.8	4.0	32
Nutrition	26.1	4.5	36
Spiritual Growth	25.2	4.3	36
Interpersonal Relations	28.8	4.2	36
Stress Management	22.4	4.4	32
Overall	150.8	22.1	208

Note: From the Health Promoting Lifestyle Profile II instrument

The weighted means of HPLP II subscales among the sample of 49 nurses who participated in this study were: health responsibility 26.1 (SD =  $\pm 4.5$ ), physical activity 20.8 (SD =  $\pm 4.0$ ), nutrition 26.1 (SD =  $\pm 4.5$ ), spiritual growth 25.2 (SD =  $\pm 4.3$ ), interpersonal relations 22.4 (SD =  $\pm 4.2$ ), and stress management 22.4 (SD =  $\pm 4.4$ ). The mean HPLP II composite score, reflecting all 52 items on the instrument was 150.8. Results of the HPLP II is most often reported in the literature using the weighted means to allow comparison of scores across studies.

Meaningful comparisons of scores across subscales requires an analysis of the 1 to 4 metric of item responses. This analysis uses the mean HPLP II total score and subscale means rather than the weighted mean scores. These data are displayed in Figure 2. The means were as follows: health responsibility 2.9, physical activity 2.6, nutrition 2.9, spiritual growth 2.8, interpersonal relations 3.2, stress management 2.8, and overall health promoting lifestyle 2.9. Personal health behaviors pertaining to the dimensions of physical activity, spiritual growth and stress management are the weakest among this group of respondents. Behaviors regarding health responsibility, nutrition, and interpersonal relations were more prevalent.

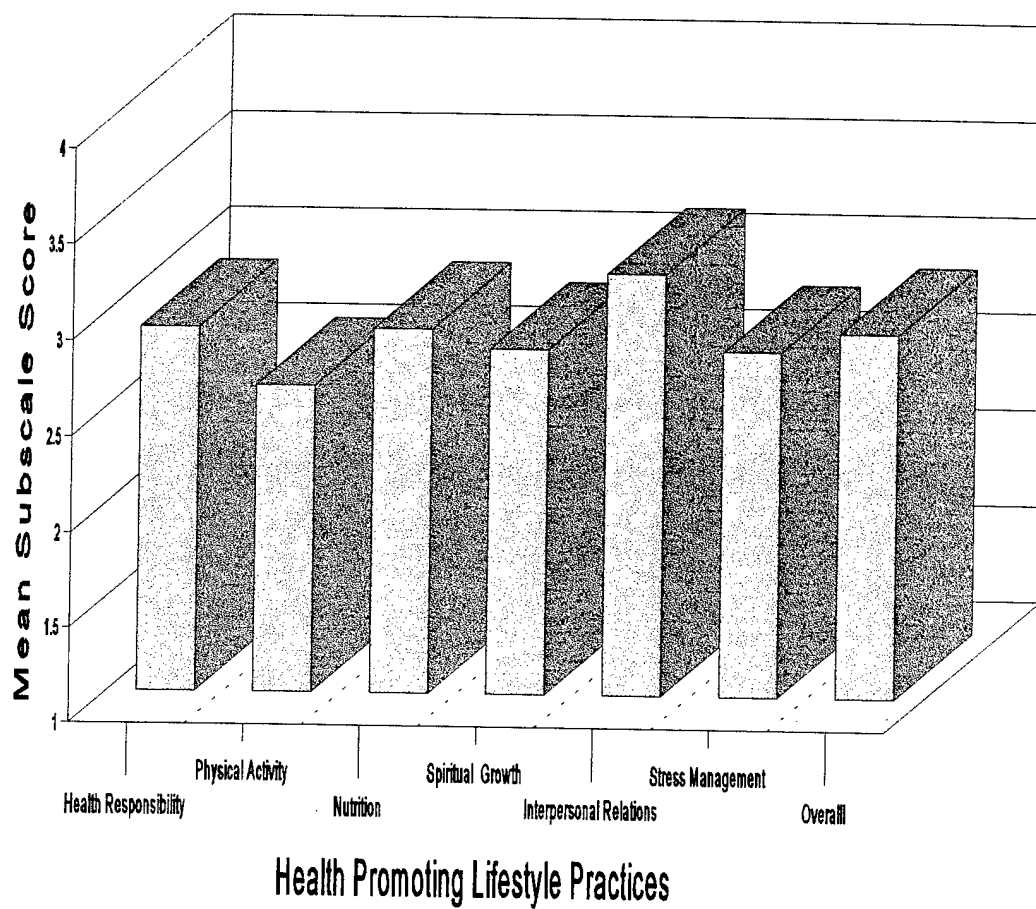


Figure 2. Comparison of Mean Subscale Scores of Health Promoting Lifestyle Practices

### Research Question Three

#### **What are the health promotion attitudes and beliefs present in nurses working in military hospitals?**

The modified version of the Health Promotion in Hospital questionnaire included three questions which addressed attitudes and beliefs regarding health promotions. Frequency and frequency percentages were calculated on each of the items which address attitudes and beliefs. Within the three questions, 16 items consisted of Likert-type statements regarding the nurses role as health promoters with answers that range from strongly agree to strongly disagree. Of the remaining items, four consisted of Likert-type statements regarding lifestyle with answers that range from very important to not important. Four items consisted of Likert-type statements regarding advice giving that range from probably effective to inconclusive. A summary of responses which specifically address the attitudes and beliefs among nurses concerning their role and expectations related to health promotion is presented in Table 3. A summary of the responses regarding attitudes and beliefs regarding the relevance of lifestyle to health status is presented in Table 4. A summary of the responses regarding beliefs pertaining to the effectiveness of giving advice is presented in Table 5.

Table 3

Percentage of Agreement regarding Attitudes and Beliefs about HealthPromotions and the Nurses Role (n= 49)


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Variable	Percentage of Nurses who:			
	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly

---

Nurses do not have enough time to practice personal health promotion	10.2	36.7	26.5	26.5
Hospital nurses are ideally placed to provide health promotion	14.3	46.9	32.7	6.1
Hospital nurses should not interfere with peoples lives	8.2	30.6	0.0	61.2
Giving detailed explanations worries patients	2	14.3	38.8	44.9
Patients find health promotion boring	0.0	24.5	44.9	30.6
I find health promotion boring	4.2	12.5	25.0	58.3

Table 3 (Continued)

Extent of Agreement regarding Attitudes and Beliefs about HealthPromotions and the Nurses Role (n= 49)

Variable	Percentage of Nurses who:			
	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
Evidence linking diet to health is uncertain	4.1	8.2	30.6	57.1
Helping people understand their body is an important function of the nurse	57.1	26.5	4.1	12.2
Patients get annoyed when asked about smoking	6.1	22.4	40.8	30.6
Physicians are more appropriate practitioners to give health advice	2.0	10.2	38.8	49.0
Nurses don't have enough training in health promotion	10.2	40.8	14.3	34.7



Table 3 (Continued)

Extent of Agreement regarding Attitudes and Beliefs about Health

Promotions and the Nurses Role (n= 49)

Variable	Percentage of Nurses who:			
	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
Health promotion is guilt producing and victim blaming	6.1	2.0	24.5	67.3
Patients don't listen to nurses advice about lifestyle	6.1	22.4	53.1	18.4
Nurses should be health advocates- placing health promotion on the political agenda	44.9	42.9	6.1	4.1
Nurses should take a leading role in health promotion in the local community	57.1	38.8	2.0	2.0

Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 4

Degree of Importance Regarding Lifestyle Factors and Health Status (n=49)

Lifestyle Factor	Percentage of nurses indicating significance of factor to health status:			
	Very important	Moderately important	Not important	Uncertain
Weight	83.3%	14.6%	2.1%	0.0%
Cigarette smoking	93.8%	4.2%	2.1%	0.0%
Exercise	77.1%	22.9%	0.0%	0.0%
Diet/Nutrition	87.5%	12.5%	0.0%	0.0%

Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 5

Beliefs in Effectiveness of Giving Advice (n= 49)

Advice	Percentage of nurses who stated:			
	Probably effective	Probably ineffective	Evidence inconclusive	No opinion
To control weight	70.2%	17.0%	12.8%	0.0%
To stop smoking	61.7%	21.3%	17.0%	0.0%
To increase exercise	59.6%	23.4%	12.8%	4.3%
To limit alcohol	61.7%	23.4%	12.8%	2.1%

Note: From the modified version of the Health Promotion in Hospital Questionnaire

#### Research Question Four

**To what degree are nurses engaged in Health Promotion activities in the inpatient setting? Specifically, are nurses providing health education services regarding smoking, alcohol, exercise and diet/nutrition?**

Findings related to this question pertain to the frequency and circumstances in which nurses question patients about smoking, alcohol consumption, exercise and diet/nutrition as part of the initial assessment history. Also, these findings reflect the frequency in which nurses provide information and advice to promote lifestyle changes related to smoking, alcohol consumption, exercise and diet/nutrition. Lastly, this question addresses the frequency in which nurses record health related habits and counseling efforts in the inpatient record

The modified version of the Health Promotion in Hospital questionnaire included eight questions which addressed nursing practice issues from which frequencies and percentages were calculated to determine the number of health education activities initiated by the nurse (Appendix B). Each of the eight items required the respondent to check all of the items that apply to patient education practices regarding smoking, alcohol,

diet/nutrition and exercise. Among the eight items, #2 addressed specific circumstances in which the respondent asks patients about smoking and #4 describes specific nursing functions geared to facilitating smoking cessation. Similarly, #8 addressed specific circumstances in which the respondent asks patients about alcohol consumption, and #10 described specific nursing functions which promote safe limits. Circumstances in which the respondents ask patients about exercise were present in item #14, and specific patient teaching activities geared to promoting exercise were addressed in item #16. Lastly, item #20 addressed specific circumstances in which the respondent asks patients about diet/nutrition, and #22 listed patient teaching methods to promote weight loss or gain and to improve overall nutritional status. Scores were calculated based on the frequency of the number of checks per question and per topic (i.e., smoking, alcohol, exercise and diet/nutrition). The answer 'None of these' was excluded in the counting of checks. The highest possible scores within each lifestyle category reflects the highest number of checkmarks possible. A higher score represents greater nurse participation in assessment (i.e., asking patients about lifestyle habits) and patient teaching (i.e., offering simple advice, providing literature). In addition, health education activities regarding

health habits performed by the nurse were measured based on the responses to: a) questions #1, #3, #5, and #6 for smoking habits; b) questions #7, #9, #11, and #12 for alcohol habits; c) questions #13, #15, #17, and #18 for exercise habits; and d) questions #19, #21, #23, and #24 for diet/nutrition habits. Each question pertains to the frequency in which nurses ask about the specific habit, advise accordingly, record the health habit, and record counseling in the nurses notes. Responses of 'always', 'usually', and 'often' were scored as 1 point, and responses of 'sometimes', 'rarely', and 'never' were scored as 0 points. Thus, a single score (mean score) derived from all of the questions pertaining to each lifestyle category reflected the degree to which nurses are involved in health promotion education in that category. Table 6 presents the data pertaining to the practice of health promotion services provided by nurses in the inpatient setting.

Table 6

Overall Mean Scores Pertaining to Smoking, Alcohol, Exercise, and  
Nutrition Education Provided by Nurses (n= 49)

Variable	Mean	SD	Highest possible score
Smoking	5.91	$\pm 2.69$	15
Alcohol	5.91	$\pm 2.60$	18
Exercise	6.89	$\pm 3.33$	19
Diet/Nutrition	7.04	$\pm 3.09$	17

Note: From the modified version of the Health Promotion in Hospital  
Questionnaire

The degree that nurses are engaged in health promotion activities pertaining to smoking is reflected in the mean score 5.91. The highest score possible within the smoking category is 15. The lowest score possible, 0, indicates that there are no circumstances in which nurses ask patients about smoking and, in addition, a score of 0 indicates that the nurse does not offer simple advice, literature, information, or referrals pertaining to smoking cessation. Also, a score of 0 indicates the nurse's failure to ask patients about health habits, advise accordingly, record health habit status, and record counseling efforts. Health promotion services that address alcohol consumption resulted in a mean score of 5.91 with the highest possible score being 18. The lowest possible score being 0. The mean score for exercise related practice issues was 6.89 with the highest possible score being 19. The lowest possible score was 0. The mean score for diet/nutrition practice issues was 7.04 with the highest possible score being 17. The lowest possible score was 0.

Additional findings are presented in Table 7 which describe the specific circumstances in which nurses question patients about smoking, alcohol, exercise, and diet/nutrition. Specific circumstances in which nurses ask about health habits include the routine practice of asking about



smoking, drinking, exercise, and nutrition when admitting a patient. Except regarding exercise, a majority of the nurses ( $> 70\%$ ) claim to inquire about health habits as part of the routine admitting assessment. Other circumstances in which nurses inquire about lifestyle habits vary depending on the lifestyle category.

The preferred methods of educating patients who smoke include referring the patient to a physician or other health care provider and offering simple advice. For patients at risk for alcohol-related problems, nurses prefer to refer the patient to a physician or other health care provider, psychologist, or psychiatrist. The most common health promotion education activities pertaining to exercise were to refer to a physician or other health care provider and to offer simple advice. The nurses preferred activity for educating patients about diet and nutrition were referring the patient to a dietician, followed by offering simple advice.

Table 7

Circumstances in which Nurses Question Patients about Smoking (n= 49)

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Circumstances:	Percentage of Nurses who Question patients about smoking:
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When patient asks for advice	16.3
When patient has a smoking- related disease	18.4
When patient is taking oral contraception	4.0
When patient has high blood pressure	10.2
Routinely with most adolescent and adult patients	75.5

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Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 8

Circumstances in which Nurses Question Patients about Alcohol (n= 49)

Circumstances:	Percentage of Nurses who Question patients about alcohol:
When asks for advice	8.1
When patient has anxiety or depression	8.1
When patient demonstrates clinical signs or symptoms related to alcohol use (including injuries)	28.5
When patient has social or marital problems	2.0
When patient has upset stomach of unknown cause	0.0
When patients' breath smells of alcohol	18.3
Routinely with most adults	71.4

Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 9

Circumstances in which Nurses Question Patients about Exercise (n= 49)

Circumstances:	Percentage of Nurses who Question patients about exercise:
When patient asks for advice	61.2
When patient is overweight or obese	26.5
When patient is underweight or malnourished	6.1
When patient has a stress-related problem	24.4
When patient is depressed	14.2
When patient has high blood pressure	20.4
When patient has heart disease	28.5
When patient is of retirement age	10.2
Routinely with most adult patients	28.5

Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 10

Circumstances in which Nurses Question Patients about Nutrition (n= 49)


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Circumstances:	Percentage of Nurses who Question patients about nutrition:
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When patient asks for advice	32.6
When patient is overweight or obese	24.5
When patient is underweight or malnourished	22.4
When patient has high blood pressure	20.4
When patient has gastro- intestinal problems	20.4
Routinely with most adults	71.4

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Note: From the modified version of the Health Promotion in Hospital Questionnaire

Additional findings pertain to the type of educative activity that nurses are most likely to engage in within the inpatient setting. As Table 11 reflects, nurses prefer to refer patients to physicians or other providers, offer simple advice and to provide literature and leaflets to patients as methods of providing health education to patients at risk.

Lastly, findings are included which reflect the frequency in which nurses question, advise and record basic data concerning smoking, alcohol, exercise and nutrition. This data is presented in Table 12 which refers to the percentage of nurses who "always" (90 to 100% of the time) address the lifestyle issues when admitting a patient.

Table 11

Health Promotion Education Activities of Nurses (n= 49)

Activity	Percentage of nurses who educate regarding:			
	Smoking	Alcohol	Exercise	Nutrition
Offer simple advice	44.8	20.4	59.1	40.8
Offer literature/leaflets	26.5	26.5	22.4	28.6
Suggest Prescription	26.5	-	-	-
Suggest drinking diary	-	2.0	-	-
Offer info about gyms, etc.	-	-	38.7	-
Offer diet sheets	-	-	-	28.6
Suggest a fitness class	-	-	24.4	-
Suggest further review	12.2	4.0	4.0	6.1
Refer to physician/other	46.9	59.1	57.1	36.7
Refer to specialist/group	36.7	36.7	-	-
Refer to psychologist, psychiatrist or social worker	-	38.7	-	-
Refer to dietician	-	-	-	98.0

Note: From the modified version of the Health Promotion in Hospital Questionnaire

Table 12

Percentage of Nurses who Address Lifestyle Habits on Admission (n= 49)

Activity:	Percentage of Nurses who 'Always' address lifestyle habits:			
	Smoking	Alcohol	Exercise	Nutrition
Ask about habits	95.9	91.8	4.1	77.6
Advise to modify habits when indicated	22.4	16.3	4.1	28.6
Record habit in nurses notes	71.4	51	4.1	28.6
Record counseling or teaching session in nurses notes	2	4.1	4.1	8.2

Note: From the modified version of the Health Promotion in Hospital Questionnaire



### Research Question Five

**Is there a relationship between the individual subscale scores or the overall score of the Health Promoting Lifestyle Profile II and the age, gender, educational level, number of years in nursing practice, and area of clinical expertise?**

Multiple linear regression analysis was conducted using the overall score on the HPLP II as the only dependent variable in the model. The subscale scores were not used as dependent variables because of the small size of the sample. Age, gender, number of years in nursing practice, and current clinical area were used as independent variables of interest. Educational level was omitted since all respondents had a BS or MS degree. Using Analysis of Variance (ANOVA), the overall F-test indicated that there was not a significant relationship between the HPLP II overall score and the independent variables ( $F = 1.56$  with 5 and 42 degrees of freedom and a corresponding p- value of 0.1913).

### Research Question Six

**Is there a relationship between the overall score of the HPLP II and reported health promotion services regarding smoking, alcohol, exercise and diet/nutrition among nurses working in the acute care**

**setting in military hospitals?**

A multivariate linear regression analysis was used to examine if a relationship exists between the overall HPLP II score and the mean scores for smoking, alcohol, exercise, and diet/nutrition from the Health Promotion in Hospital Practice instrument. Using canonical correlation, the Wilks' Lambda Value of 0.863 was determined. A corresponding F- test value was derived to be 1.75 (4 and 44 degrees of freedom),  $p = 0.1572$ . Based on this analysis, there was not a significant relationship between the HPLP II overall score and professional health promotion practice activities regarding smoking, alcohol, exercise, and diet/nutrition.

**Research Question Seven****What are the additional comments made regarding health promotion among nurses working in a military hospital?**

Comments concerning the subject of health promotion in the hospital were included as a response to an open-ended question in the modified version of the Health Promotion in Hospital questionnaire. Fifteen of the 49 participants gave written narrative comments and the researcher identified four central themes of concern from the nurses comments. Comments reflected negative, positive and neutral perspectives toward health

promotion in the hospital setting. The four themes were as follows: 1) six comments reflected views regarding current health promotion practices within the hospital; 2) several statements presented specific nurse-related issues regarding the nurses role as health promoters; 3) many comments centered on the issue regarding the effectiveness of "advice giving" and lastly; 4) nurses comments highlighted various resources necessary to implement an effective health promotion program for inpatients.

Examples of comments reflecting current health promotion practices in the hospital include one nurse's comment that "health promotion is departmentalized in areas such as physical therapy, occupational therapy, dietary, etc". Similarly, a nurse stated that "In labor and delivery, a thorough assessment of the patient is very important especially regarding diet, smoking habits, and alcohol consumption... social services, dietary, or any other consult is usually referred to the patient when needed. A broad perspective was presented by one nurse who stated "health promotion is vastly underrated...the medical community is not supportive of health promotions."

Specific nurse-related issues were derived from comments pertaining to the nurses' role as health promoters. One nurse implied that nurses are not

in the position to be health promoters stating "nurses as a group don't practice health improving/promotion activities so why should we take the lead in this area?". One nurse added that health promotion is "too difficult for ward nurses to do" and five comments inferred that nurses don't have the time or resources for health promotion activities and there is rarely enough time to document teaching and counseling sessions. In contrast, one nurse presented the view that nursing could take the lead as health promoters in the hospital setting. In reference to health promotion, the nurse stated "Nursing could really make some inroads in this area- and perhaps become more respected. No one else seems to be spear-heading this effort."

Individual perspectives regarding the role of the nurse as an advice giver were offered. Some nurses presented the view that life changing events impact lifestyle changes more than advice. One nurse stated "I feel advice alone will probably be ineffective". The nurse added "I have found some people need a major diagnosis (i.e., cancer) to quit or change their habits. Using several different modes, depending on the patient, is important". Similarly, another nurse stated "You can teach/preach health promotion until you're blue in the face, but all the prodding in the world won't change the persons' actions until an event makes them change their

own mind (whether it be an event that happens to them, a friend, coworker, someone with their same age/lifestyle) then they can truly appreciate and realize they need to change their own lifestyle". In addition, one nurse felt strongly that although some people want to follow advice to improve lifestyle habits, they do not have the time or proper support systems to encourage them. This nurse stated that "more often than not, people want to change their habits, but have difficulty finding the time in the family schedule...most people probably know what to do, they need constant support to reach their goals. Not necessarily from loved ones but from others who are trying for the same goals...". Along those same lines, one nurse stated that health promotion is "Probably most effective in rehab programs that help change habits...". Another, nurse stated that "health promotion is a personal choice. Advice from other people can only raise one's awareness".

Lastly, nurses offered specific suggestions for improving health promotion in the hospital setting. Among the various ideas, one nurse suggested the distribution of Health Promotion booklets to all inpatient units. Another added that "health promotions should be a job in and of itself. This person should be in the medical facility and very accessible".

Two nurses cited specific wellness/prevention strategies proposing a proactive approach within the hospital setting (i.e., stress management, dietary modification, seat belt usage, yearly physical, screening, exams, etc) to reduce illness and hospitalizations.

### Summary

This chapter presented the analysis of the data that examined the health promoting lifestyle behaviors, attitudes, beliefs and practices of a sample of 49 military nurses. The data were presented and organized according to the seven research questions. Descriptive statistics were used to analyze the demographic profile and to calculate the attitudes, beliefs, practices and health promoting behaviors of the participants. Regression analysis was used to determine and explore the relationship between the HPLP II overall score and the demographics of the group. Regression analysis was used to determine and explore the relationship between the HPLP II overall score and the reported health promotion practices among the nurses. Finally, narrative comments made by the participants were reported.

The findings in this study are as follows. Scores were highest among this sample of nurses within the dimensions of health responsibility, nutrition, and interpersonal relations. Findings were compared to a study that investigated the Health Promoting Lifestyle Profiles of automotive plant workers (Lusk, 1995). In addition, nurses attitudes and beliefs about their role in health promotion are generally positive. Overall, nurses accept their role as health promoters and perceive strong links between lifestyle and disease. Nurses feel they lack time to practice personal health promotion and that they didn't have enough training in health promotion. Also, opinions regarding the nurses' belief in the effectiveness of giving advice vary among nurses. Findings about nurses' attitudes and beliefs are generally consistent with findings in the McBride (1994) study. In terms of professional practice activities, nurses are inconsistent with regard to questioning, advising and recording the health habits of inpatients. There were no relationships between demographic characteristics and the HPLP II. Also, there is not a relationship between nurses' personal health promoting lifestyle and professional practice among nurses.

## V. SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

A summary of this research study which examined the health promoting lifestyle behaviors, attitudes, beliefs, and practices of a group of nurses will be presented in this chapter. Included will be a discussion of the findings in relationship to the purpose of the study, the literature and the conceptual framework. In addition to the research findings, related conclusions, implications, and recommendations are presented.

### Summary

This descriptive research study addressed the problem regarding the professional nurses role in health promotion within the acute care setting in a military hospital. The justification for the study is based on national goals to improve the health of all Americans by the year 2000. In addition, recent health promotion strategies within the military community are of great



importance in targeting high risk groups, reducing health care costs, and ensuring a fit military force. The purpose of this study was to examine and describe the personal health promoting lifestyle behaviors, attitudes, beliefs and practices of medical/surgical and obstetric/gynecologic nurses working on acute care wards in a military hospital. It was proposed that the findings of this study would promote the implementation of health promotion strategies within the hospital setting.

The predominate theme of interest within this study was health promotion. The variables of interest that were measured and described in this study were health promoting lifestyle behaviors, health promotion attitudes and beliefs, and health promotion practices among hospital nurses. In addition, sociodemographic characteristics were investigated. The concepts reviewed in the literature review were health promotion, prevention and the conceptual framework. The empirical review of the literature addressed the personal health promoting lifestyle behaviors of nurses, attitudes, beliefs and practices of health care professionals regarding health promotion, and the concept of nurses as role models.

Cox's (1982) Interaction Model of Client Health Behavior provided the framework for the purpose and design of this study. Modifications to the

model were necessary providing background variables of the professional nurse. A model was developed by the investigator to illustrate the nurse-related variables that were investigated. The investigators' adaptation of the model incorporated the professional nurses' role in impacting client health behavior.

The Health Promoting Lifestyle Profile II (Walker, Sechrist & Pender, 1987), modified version of the Health Promotion in Hospital Practice instrument, and demographic questions from the Nurse Demographic Data survey were the instruments used to collect data about the health promoting behaviors, attitudes, beliefs and practices of the sample. The convenience sample of 49 hospital nurses was obtained from a large military hospital in an urban Midwestern region. Descriptive statistics and multiple regression were used to analyze the data collected.

### Findings and Conclusions

The findings of this research study support several conclusions. These findings and conclusions are presented as they pertain to the seven research questions.

### Research Question One

What are the demographics of the sample?

The most significant findings related to this question relate to gender, nursing degree, and employment status. The findings and conclusions pertaining to the demographic profile are as follows:

It can be concluded from the results of the demographic data that active duty military nurses may be more likely to participate in research conducted by a military nurse than their civilian counterparts. It can also be concluded that of those BSN-prepared nurses, most did not obtain an Associates degree prior to completion of the BSN program. This finding was to be expected since the Air Force requires all nurses to be Bachelors' prepared prior to commissioning or hiring as a civilian nurse. The demographic profile of the group reveals that the average participant in this research study was an Active Duty female between the ages of 22 and 46 years was educated in a BSN nursing program as their basic nursing education.

### Research Question #2

What are the personal health promoting lifestyle behaviors specific to this group of nurses?

The findings of this research question support a conclusion based on an analysis of the six dimensions of personal health behaviors among the nurse participants. A presentation of the findings and conclusion follows.

In this study a comparison of the HPLP II mean scores across the six subscales showed the relative prevalence of behaviors regarding the six dimensions of a healthy lifestyle. The findings of this study demonstrated that scores were highest among this sample of nurses within the dimensions of health responsibility, nutrition, and interpersonal relations. Among the nurses surveyed, scores were lowest within the dimensions of physical activity, spiritual growth, and stress management. These findings were partially consistent with the Lusk et al., (1995) study, whereby scores were highest among the sample within the dimensions of interpersonal relations, stress management, and nutrition. Scores for the plant workers were lowest within the dimensions of physical activity and health responsibility.

Comparing the individual subscale scores of nurses to the subscale scores describing the workers in the Lusk et al., (1995) study it can be concluded that the health behaviors indicative of a healthy lifestyle are more prevalent among nurses. A comparison of the scores across subscales was based on an analysis of the 1 to 4 point metric of item responses. For each Health

Promoting category, nurses consistently scored higher than the group of automotive plant workers surveyed by Lusk et al., (1995). In addition, the Health Promoting Lifestyle total score of 2.9 found among the sample of nurses is higher than the score regarding the sample of plant workers which was 2.6. The findings describing nurses are consistent with the Lusk et al., (1995) study when considering the effect of gender. Significant differences were found in the mean scores for total health promoting lifestyle, health responsibility, exercise and the interpersonal support subscales among the women in the Lusk et al., (1995) study.

From these findings, the conclusion is that strengths and weaknesses are likely to exist among dimension of a healthy lifestyle for various populations. Also, demographic variables such as age, education level and gender may account for differences between populations.

### Research Question #3

What are the health promotion attitudes and beliefs present in nurses working in military hospitals?

The findings of this research question support several conclusions that were drawn from an analysis of nurses responses to statements pertaining to the nurses' role as health promoters, the impact of lifestyle to

health status, and effectiveness of giving advice. The findings and conclusions are presented.

The extent of agreement regarding attitudes and beliefs about the nurses role in health promotions indicate generally positive attitudes among nurses. More than one half of the nurses (61.2%) agreed that nurses are ideally placed to provide health promotion and many (83.6%) nurses felt that helping people understand their body is an important function of the nurse. In addition, an overwhelming majority (87.8%) of the nurses felt that nurses should be health advocates and a large percentage of nurses (95.9%) felt that nurses should take a leading role in promoting health in the local community. In addition, a large percentage of the nurses (87.8%) disagreed with the statement that physicians are more appropriate practitioners to give health advice.

These findings are similar to McBrides' (1994) findings whereby 95.5% of the nurses felt that they should be health advocates and 89.2% of the nurses felt that they should take a leading role in the prevention of disease in their local community. Within the McBride (1994) study, 93.7% of the nurses thought that nurses are ideally placed to give health education to patients and 97.3% of the nurses felt that an important function of the

nurse is helping people understand how their body works. The McBride (1994) study revealed that 94.6% of the nurses were in agreement with the statement that "nurses are more appropriate people than doctors to get involved in health promotions".

Further supporting this positive view, findings in this study indicate that more than 50% of the participants disagreed with negative statements regarding health promotion. Most nurses (91.8%) did not agree with the statement that health promotion is guilt producing and victim blaming. Another statement in which most of the nurses (87.7%) did not agree was "peoples' lifestyles are conditioned by culture and environment and people won't change". Despite nurses positive attitudes regarding their role in health promotion, approximately 50% of the nurses agreed that nurses do not have enough time to practice personal health promotion and 46.9% feel they do not have enough training in health promotion.

Again, most of these findings were consistent with the McBride (1994) study whereby 81.1% of the nurses did not agree that health promotion was guilt producing and victim blaming. Findings in McBrides' (1994) study regarding the influence of nursing interventions on lifestyle changes revealed a range of nurses (40%-100%) agree that nurses can

change peoples' lifestyles despite cultural and environmental influences.

The extent of agreement varied according the grade of the nurse surveyed in the McBride (1994) study. Lastly, in comparison to this study, considerably more nurses (80.6%) in the McBride (1994) study felt that they did not have enough training in health promotion and 67% of the nurses felt that they did not have the time to practice personal health promotion effectively.

Several conclusions are presented regarding nurses attitudes and beliefs about their role as health promoters. The first is that nurses tend to have positive attitudes regarding health promotion in the hospital setting. Secondly, nurses accept their role as health promoters and thirdly, many nurses feel that they lack time to practice personal health promotion and that they don't have enough training in health promotion.

The findings and conclusions regarding the relevance of lifestyle to health status are presented. Many of the nurses surveyed in this study feel that weight, cigarette smoking, exercise, and diet/nutrition are important determinants to overall health status. Similarly, the nurses in the McBride (1994) study perceived strong links between lifestyle and disease as well. The conclusion derived from these findings is that nurses are highly aware of the relationship between lifestyle behaviors and health.



The findings and conclusions regarding the nurses beliefs in the effectiveness of giving advice are presented. The findings in this study indicate that 70.2% of the nurses feel that it is probably effective to give advice to patients in order to control weight. Among the nurses surveyed, 61.7% feel that it is probably effective to give advice to patients regarding smoking cessation and 61.7% of the nurses feel advice can be provided to limit alcohol consumption. Fewer nurses (59.6%) feel that it is probably effective to give advice to patients in order to promote increased exercise. The McBride study (1994) reported that there was considerable disagreement between the different grades of nurses in terms of beliefs in the effectiveness of giving advice. Depending on the grade of the nurse, the percentage of nurses who feel that patients are receptive to advice and modify their behavior accordingly ranged from 60% (grade G nurses) to 100% (grade C nurses). The McBride (1994) study does not include a clear description of the grade categories of the nurses surveyed. The conclusions from these findings is that nurses do not agree about the effectiveness of giving advice. Many nurses feel they can, by giving advice, change peoples' lifestyles despite cultural and environmental influences. About the same amount of nurses, however, feel advice giving is probably ineffective or

that the evidence is inconclusive regarding advice giving. This conclusion is further supported by the findings derived from the nurses narrative comments in the survey.

#### Research Question Four

To what degree are nurses providing health education services regarding smoking, alcohol, exercise and diet/nutrition?

One finding derived from this question is that, in the hospital setting, nursing practice is inconsistent in terms of questioning/recording and educating patients about lifestyle habits. This finding supports the conclusion that nurses are not actively involved in health promotion activities in the inpatient setting. The conclusion was reached by comparing actual nurse participation with the highest possible degree of participation. Within the categories of smoking, alcohol, exercise, and diet/nutrition, the highest possible score reflects a high degree of nurse participation such as asking patients about lifestyle habits, offering simple advice, giving out literature or leaflets, and making referrals. (Table 6). A direct comparison of these findings to the findings in the McBride (1994) study is not possible due to the differences in data analysis between studies.

A second finding regarding this question relates to the specific circumstances in which nurses question patients about smoking, alcohol, exercise, and diet/nutrition (Tables 7, 8, 9, 10). A noteworthy finding is that greater than 70% of the nurses routinely ask adult inpatients about smoking, alcohol, and nutrition, whereas, only 28.5% of the nurses routinely ask inpatients about exercise habits. Thus, other than exercise-related issues, a majority of the nurses (> 70%) ask patients about lifestyle habits. Although these findings are generally positive, the percentage of nurses who question patients about lifestyle habits is higher among the nurses surveyed in the McBride (1994) study.

Aside from routine practice, the most common circumstance in which nurses inquire about health habits vary depending on the lifestyle category. The most common circumstance in which nurses ask about smoking is when the patient has a smoking-related disease. Likewise, respondents are more likely to ask about alcohol consumption when a patient presents with clinical signs or symptoms related to alcohol use. The most common circumstance in which nurses question patients about exercise and nutrition is when the patient asks for advice.

A comparison can not be made to the McBride (1994) study concerning the percentage of nurses who give advice when it is specifically requested by a patient. In the McBride (1994) study, the percentage of nurses who give advice on request are as follows: a) for smoking, 56.9%; b) for alcohol, 57.6%; c) for exercise, 65.6%; and d) for nutrition, 64.9%. Unlike the McBride study, which measured the percentage of nurses who give advice on request, this study measured the percentage of nurses who question (not advise) patients about lifestyle habits when the patient inquires. Tables 7, 8, 9, and 10 in this study provides the data to compare the percentage of nurses who question patients when the patient specifically asks. The data is as follows: a) for smoking, 16.3%; b) for alcohol, 8.1%; c) for exercise, 61.2%; and d) for diet, 32.6%. Due to the differences inherent in the instrument items, a comparison is not made regarding this data.

An additional perspective regarding the percentage of nurses who provide health promotion advice is extrapolated from Table 11. Here, the percentage of nurses who offer simple advice is markedly higher possibly due to the high risk status of the patient, not necessarily from specific requests by a patient. Based on this data, the percentage of nurses who offer simple advice regarding smoking is 44.8%; alcohol, 20.4%; exercise,

59.1%; and nutrition, 40.8%.

Another finding regarding health education services provided by nurses pertains to the type of educative activity that nurses are most likely to engage in when the patient needs advice (Table 11). The three most common health promotion education activities reported by nurses were to: a) refer the patient to a physician or other health care provider; b) offer simple advice; and c) offer literature and/or leaflets to patients.

The findings regarding the frequency in which nurses question, offer advice and record lifestyle habits suggest inconsistencies in practice. Questioning and offering advice about lifestyle issues scored higher for consistency than routine recording in the nurses notes. From this it can be concluded that, although nurses are providing health promotion education to inpatients, only a small percentage of the nurses are recording baseline lifestyle data and education efforts in the nurses notes. These findings are consistent with the findings in the McBride (1994) study which showed nurses scored lowest for consistency in recording.

#### Research Question Five

Is there a relationship between the individual subscale scores or the overall score of the Health Promoting Lifestyle Profile II and the age,

gender, educational level, number of years in nursing practice and area of clinical expertise?

The findings of this research study revealed that there were no relationships between demographic characteristics and the HPLP II scores. A conclusion to this question is that age, gender, number of years in nursing practice and area of clinical expertise were not related to personal health promoting lifestyle practices among the nurses in this study. A limitation to this study is that there was a small sample size which limited the amount of information available for analysis. Relationships among the variables may exist, however they were not detectable through the regression analysis inferential statistics.

#### Research Question Six

Is there a relationship between the overall score of the HPLP II and reported health education services provided regarding smoking, alcohol, exercise, and nutrition among nurses working in the acute care setting in military hospitals?

The findings of this research study revealed that there is not a significant relationship between personal health promoting lifestyle behaviors and health promotion education provided by nurses. The

conclusion derived from these findings is that personal health promotion behaviors do not influence the nurses degree of involvement in promoting health for inpatients. The small sample size may have limited the amount of information available for analysis thus possible relationships between variables may not have been detected.

#### Research Question Seven

What are the additional comments made regarding health promotions among nurses working in a military hospital?

The findings that pertain to this question were derived from narrative comments made by 15 of the nurse participants. Nurses communicated personal views regarding health promotion in the acute care setting. Statements reflected a variety of views regarding hospital-based health promotion practice, nurse related issues, the effectiveness of advice giving, and ideas for improving health promotion in the hospital. Conclusions that are drawn from the statements made by the nurses are as follows: In general, nurses recognize various departments such as dietary services and physical therapy as an integral component of inpatient health promotion services. Also, nurses perceive time and resources as specific barriers related to the nurses role in health promotions. Moreover, nurses feel that patients are not

motivated to change lifestyle habits until they experience a life threatening change in a friend or themselves which threatens their health. According to the nurses, advice is considered a tool which increases awareness however, actual lifestyle changes occur only when patients choose to change and when patients have the time, resources and support needed to encourage their efforts. A final conclusion is that nurses offer insightful suggestions for improvements in the hospital setting which may promote the health of inpatients.

### Implications

The conceptual framework for this study was Cox's Interaction Model of Client Health Behavior (1982). Cox (1982) states that health care behavior is determined by individual client variables and client-provider interactions. The model depicts the role of the health care provider as that of a teacher, counselor and technician. The model shows the role of the professional nurse affecting client health behavior. The findings of this descriptive research study revealed important information for acute care nurses concerned with their personal health behaviors and the health of hospitalized patients. Following is a presentation of the implications for



inpatient nursing practice.

The overall health promoting lifestyle behaviors of this sample of nurses is less than optimum. The subjects scores on the HPLP II indicate strengths and weaknesses among the six dimensions of health. Health behavior dimensions that need improvement pertain to exercise, spiritual growth, and stress management. The group of nurses could benefit from programs that promote these areas of health. The strongest dimensions of health among the nurses pertain to health responsibility, nutrition and interpersonal relations. Incorporating the interpersonal relations dimension in health promotion seminars and workshops may promote learning and compliance among nurses in efforts to increase exercise, grow spiritually and manage stress. For example, teaching strategies that incorporate small working groups and frequent meetings may serve to build relationships, provide support for long terms lifestyle changes and encourage accountability among nurses. Ultimately, nurses committed to a healthier lifestyle will function as a positive role model for patients and can contribute practical, meaningful advice from experiences gained in personal self improvement.

In terms of professional practice, nurses attitudes and beliefs regarding health promotions in the hospital setting are generally positive, however, nurses are skeptical about the effectiveness of their role in giving advice to patients. Nurses need to learn that the advice they give to patients and families will make a difference. Many nurses feel that patients are not receptive to information unless it is directly related to a preexisting medical condition. The feeling is that only in those situations such as when patients are recovering from a heart attack, cancer, or stroke are patients motivated to change. Thus, efforts to give advice to patients who do not present with clinical manifestations of disease is considered by many nurses to be ineffective. The implication, then, is that the scope of nursing practice in the hospital setting may be limited to include only tertiary prevention strategies which are aimed at disease management rather than primary prevention and early detection of disease. Although the data presented in this study is in no way conclusive, it does raise questions concerning possible ways to provide quality care to inpatients. The implications for administration, practice and education are presented.

Nurse administrators are ideally placed to initiate hospital wide changes that proactively address the primary and secondary prevention

needs of inpatients. In addition, nurse administrators are challenged to promote a climate within the hospital setting that helps to maintain or enhance the level of wellness, self actualization and fulfillment of nurses and patients. Initiatives to establish health promotion priorities within the hospital setting would provide a realistic focus of care in which to determine health promotion goals for inpatients. A multidisciplinary approach may be an effective method in which professional networks can widen the sphere of influence upon patients. Internal hospital wide changes that promote healthy lifestyles may lead to behavioral changes among nurses both in terms of personal habits and in their professional practice.

Ideally, staff nurses could actively participate in the process of designing, implementing and evaluating a structured health promotion program for inpatients. The results of this study are encouraging in that nurses are aware of the links between lifestyle and disease, they consider themselves to be health advocates, and they view this role as an important function of the nurse. In spite of this optimistic view, however, the current trend of practice identified in this study is that health promotion is not routinely integrated into clinical practice. Failure of the nurse to be concerned with the health promotion needs of inpatients may adversely

affect a persons' overall sense of well being and health. Over time, a persons' unhealthy lifestyle could result in a chronic, debilitating or irreversible condition.

Perhaps nurses are not involved in health promotion in the inpatient setting because they are not fully educated in health promotion and prevention issues. Nurse educators need to evaluate basic nursing programs to ensure that the concepts of health promotion and prevention are integrated throughout the nursing curriculum and include application to the inpatient setting. More emphasis is needed in assessment and education strategies for meeting the health promotion needs of hospitalized adults. A required course on adult lifestyle behaviors such as smoking, alcohol consumption, exercise and diet/nutrition would increase students awareness of health promotion and provide research based patient teaching strategies for effecting change.

Nurse administrators, clinicians and educators have a responsibility to promote an atmosphere within the hospital that empowers staff and patients, through education and informed choices, to modify behaviors toward a healthier lifestyle. Also it is important for all nurses to recognize the role of the staff nurse in health promotion which is vital to the success

of a hospital based health promotion program for inpatients.

### Recommendations

Recommendations for further study include:

1. This study should be replicated using a larger sample size so more complete information about the relationships among variables might be established through the regression analysis inferential statistics.
2. This study should be replicated employing specific strategies such as offering incentives to recruit more civilian nurses.
3. This study should be replicated using other military hospitals to determine if HPLP II norms exist among nurses working in military hospitals.
4. This study should be replicated to determine if health promotion attitudes, beliefs and practice norms exist among nurses working in military hospitals.
5. Further research is needed to define the domains of health promotion practice for nurses.
6. Further research is needed to establish the validity and reliability of the Health Promotion in Hospital Practice Questionnaire.

7. Investigate the relationship between health promotion attitudes, beliefs and practices and content in undergraduate nursing education related to prevention and health promotion.
8. Further research is needed to determine whether specific weaknesses' in personal health promoting lifestyle behaviors correspond to weaknesses' in professional practice.
9. Further research is needed to determine possible relationships between demographics and health promotion professional practice
10. Further development and rigorous evaluation of a Health Promotion in Hospital Practice instrument is needed.
11. This study should be replicated in community health, mental health, rehabilitation, primary care, and other outpatient clinics to compare professional nurses behaviors, attitudes, beliefs, and practices across settings.

In conclusion, hospital nurses are challenged to adopt healthy lifestyle behaviors and to assess and promote the health of all inpatients. The relationship between personal health promoting lifestyle behaviors and professional attitudes, beliefs and practices has not been well delineated or developed in the literature. There is a need to investigate the manner in

which health promotion needs are identified in the hospital setting.

Integrating health promotion assessment and education activities in the scope of inpatient care is a critical function of professional nursing practice and must be investigated. Conducting health promotion research in the hospital setting provides information regarding medical, surgical and obstetrical staff nursing behaviors, attitudes, beliefs and practices. Findings related to this group of nurses provides preliminary data necessary for establishing health promotion programs in the hospital setting. Hospital based health promotion programs combined with outpatient primary care, family practice and internal medicine health promotion endeavors will provide a comprehensive approach to care for all patients.

## Appendix A

### Health Promoting Lifestyle Profile II Questionnaire



## LIFESTYLE PROFILE II

**DIRECTIONS:** This questionnaire contains statements about your *present* way of life or personal habits. Please respond to each item as accurately as possible, and try not to skip any item. Indicate the frequency with which you engage in each behavior by circling:

N for never, S for sometimes, O for often, or R for routinely

	NEVER	SOMETIMES	OFTEN	ROUTINELY
1. Discuss my problems and concerns with people close to me.	N	S	O	R
2. Choose a diet low in fat, saturated fat, and cholesterol.	N	S	O	R
3. Report any unusual signs or symptoms to a physician or other health professional.	N	S	O	R
4. Follow a planned exercise program.	N	S	O	R
5. Get enough sleep.	N	S	O	R
6. Feel I am growing and changing in positive ways.	N	S	O	R
7. Praise other people easily for their achievements.	N	S	O	R
8. Limit use of sugars and food containing sugar (sweets).	N	S	O	R
9. Read or watch TV programs about improving health.	N	S	O	R
10. Exercise vigorously for 20 or more minutes at least three times a week (such as brisk walking, bicycling, aerobic dancing, using a stair climber).	N	S	O	R
11. Take some time for relaxation each day.	N	S	O	R
12. Believe that my life has purpose.	N	S	O	R
13. Maintain meaningful and fulfilling relationships with others.	N	S	O	R
14. Eat 6-11 servings of bread, cereal, rice and pasta each day.	N	S	O	R
15. Question health professionals in order to understand their instructions.	N	S	O	R
16. Take part in light to moderate physical activity (such as sustained walking 30-40 minutes 5 or more times a week).	N	S	O	R
17. Accept those things in my life which I can not change.	N	S	O	R
18. Look forward to the future.	N	S	O	R
19. Spend time with close friends.	N	S	O	R
20. Eat 2-4 servings of fruit each day.	N	S	O	R
21. Get a second opinion when I question my health care provider's advice.	N	S	O	R
22. Take part in leisure-time (recreational) physical activities (such as swimming, dancing, bicycling).	N	S	O	R
23. Concentrate on pleasant thoughts at bedtime.	N	S	O	R
24. Feel content and at peace with myself.	N	S	O	R
25. Find it easy to show concern, love and warmth to others.	N	S	O	R
26. Eat 3-5 servings of vegetables each day.	N	S	O	R

	NEVER	SOMETIMES	OFTEN	ROUTINELY
27. Discuss my health concerns with health professionals.	N	S	O	R
28. Do stretching exercises at least 3 times per week.	N	S	O	R
29. Use specific methods to control my stress.	N	S	O	R
30. Work toward long-term goals in my life.	N	S	O	R
31. Touch and am touched by people I care about.	N	S	O	R
32. Eat 2-3 servings of milk, yogurt or cheese each day.	N	S	O	R
33. Inspect my body at least monthly for physical changes/danger signs.	N	S	O	R
34. Get exercise during usual daily activities (such as walking during lunch, using stairs instead of elevators, parking car away from destination and walking).	N	S	O	R
35. Balance time between work and play.	N	S	O	R
36. Find each day interesting and challenging.	N	S	O	R
37. Find ways to meet my needs for intimacy.	N	S	O	R
38. Eat only 2-3 servings from the meat, poultry, fish, dried beans, eggs, and nuts group each day.	N	S	O	R
39. Ask for information from health professionals about how to take good care of myself.	N	S	O	R
40. Check my pulse rate when exercising.	N	S	O	R
41. Practice relaxation or meditation for 15-20 minutes daily.	N	S	O	R
42. Am aware of what is important to me in life.	N	S	O	R
43. Get support from a network of caring people.	N	S	O	R
44. Read labels to identify nutrients, fats, and sodium content in packaged food.	N	S	O	R
45. Attend educational programs on personal health care.	N	S	O	R
46. Reach my target heart rate when exercising.	N	S	O	R
47. Pace myself to prevent tiredness.	N	S	O	R
48. Feel connected with some force greater than myself.	N	S	O	R
49. Settle conflicts with others through discussion and compromise.	N	S	O	R
50. Eat breakfast.	N	S	O	R
51. Seek guidance or counseling when necessary.	N	S	O	R
52. Expose myself to new experiences and challenges.	N	S	O	R

## HEALTH-PROMOTING LIFESTYLE PROFILE II

### Scoring Instructions

Items are scored as	Never (N)	=	1
	Sometimes (S)	=	2
	Often (O)	=	3
	Routinely (R)	=	4

A score for overall health-promoting lifestyle is obtained by calculating a mean of the individual's responses to all 52 items; six subscale scores are obtained similarly by calculating a mean of the responses to subscale items. The use of means rather than sums of scale items is recommended to retain the 1 to 4 metric of item responses and to allow meaningful comparisons of scores across subscales. The items included on each scale are as follows:

Health-Promoting Lifestyle	1 to 52
Health Responsibility	3, 9, 15, 21, 27, 33, 39, 45, 51
Physical Activity	4, 10, 16, 22, 28, 34, 40, 46
Nutrition	2, 8, 14, 20, 26, 32, 38, 44, 50
Spiritual Growth	6, 12, 18, 24, 30, 36, 42, 48, 52
Interpersonal Relations	1, 7, 13, 19, 25, 31, 37, 43, 49
Stress Management	5, 11, 17, 23, 29, 35, 41, 47

## Appendix B

### Health Promotion in Hospital Practice Questionnaire

## HEALTH PROMOTION IN HOSPITAL PRACTICE

### SMOKING

1. When admitting a patient, how often do you ask patients whether they smoke?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

2. (Skip if answered Never to question # 1)

Under what circumstances do you ask patients about smoking? (Check all that apply)

- ☐ When a patient asks for advice about smoking
- ☐ When a patient has smoking-related disease
- ☐ When a female patient is taking oral contraceptives
- ☐ When a patient has high blood pressure
- ☐ Routinely with most adolescent/adult patients
- ☐ Other (please specify) .....

3. When you know that a patient smokes, how often do you advise stopping smoking?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

4. (Skip if answered Never to question # 3)

If a patient requires advice on stopping smoking, which of the following are you likely to do? (Check all that apply)

- ☐ Offer simple advice or simply advise that they stop smoking
- ☐ Offer literature or leaflets
- ☐ Suggest a prescription (e.g. Nicorette)
- ☐ Suggest a further consultation to review progress
- ☐ Refer to physician or other provider  
(Please specify title or position of provider) .....
- ☐ Refer to stop smoking group (Please specify type of group) .....
- ☐ None of these
- ☐ Other (Please specify) .....

5. When admitting a patient, how often do you record smoking status (i.e. whether or not they smoke) in the nurses notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

6. How often do you record counseling or counseling strategies concerning smoking in the nurses notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

## ALCOHOL

7. When admitting a patient, how often do you ask patients about their alcohol consumption?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

8. Under what circumstances do you inquire about a patient's drinking habits?

- ☐ When a patient asks for advice about drinking
- ☐ When a patient presents with anxiety or depression
- ☐ When a patient has clinical signs or symptoms which might be related to alcohol consumption (including injuries arising from accidents due to drinking alcohol)
- ☐ When a patient has social or marital problems
- ☐ When a patient has an upset stomach with no obvious cause
- ☐ When a patient's breath smells of alcohol
- ☐ Routinely with most adults
- ☐ Other (please specify) .....

9. If a patient requires advice on changing their drinking habits, how often do you advise abstaining from alcohol?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

10. If you have identified a patient with a drinking problem, which of the following are you likely to do? (Check all that apply)

- ☐ Offer simple advice about safe limits
- ☐ Offer literature or leaflets
- ☐ Suggest use of drinking diary
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to a physician or other provider  
(please specify by indicating title or position of provider) .....
- ☐ Refer to a specialist agency or self-help group  
(Please specify which agency) .....
- ☐ Refer to a psychologist/psychiatrist/social worker
- ☐ None of these
- ☐ Other (please specify) .....

11. How often do you record the amount a patient drinks in the nursing notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

12. How often do you record counseling or counseling strategies concerning alcohol in the nursing notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

## EXERCISE

13. When admitting a patient, how often do you ask patients about their exercise habits?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

14. Under what circumstances do you ask patients about exercise? (check all that apply)

- ☐ When a patient asks for advice about exercise
- ☐ When a patient is overweight or obese
- ☐ When a patient is underweight or malnourished
- ☐ When a patient presents with a stress-related problem
- ☐ When a patient is depressed
- ☐ When a patient has high blood pressure
- ☐ When a patient has heart disease
- ☐ When a patient is of retirement age
- ☐ Routinely with most adult patients
- ☐ Other (Please specify) .....

15. When you know that a patient does not exercise, how often do you advise exercise?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

16. If a patient requires advice on appropriate exercise, which of the following are you likely to do? (Check all that apply)

- ☐ Offer simple advice
- ☐ Offer literature or leaflets
- ☐ Offer information about local sports centers, gyms, recreational facilities
- ☐ Suggest a fitness class
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to physician or other provider  
(Please specify by indicating title or position of provider) .....
- ☐ None of these
- ☐ Other (Please specify) .....

17. How often do you record in the nurses notes whether or not a patient exercises?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

18. How often do you record counseling or counseling strategies concerning exercise in the nurses notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

## DIET AND NUTRITION

19. When admitting a patient, how often do you ask patients about diet?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

20. Under what circumstance do you ask patients about diet? (Check all that apply)

- ☐ When a patient asks for dietary advice
- ☐ When a patient is overweight/ obese
- ☐ When a patient is underweight or malnourished
- ☐ When a patient has high blood pressure
- ☐ When a patient has gastro-intestinal problems
- ☐ Routinely with most adult patients
- ☐ None of these
- ☐ Other (Please specify) .....

21. When you know that a patient needs dietary advice, how often do you give it?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

22. If a patient requires advice about losing/gaining weight or improving their diet, which of the following are you likely to do? (Check all that apply)

- ☐ Offer simple advice
- ☐ Offer diet sheet
- ☐ Offer literature or leaflets (other than a simple diet sheet)
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to a physician or other provider  
(Please specify by indicating title or position of provider) .....
- ☐ Refer to a dietician
- ☐ Refer to another agency or self-help group (Please specify) .....
- ☐ None of these
- ☐ Other (Please specify) .....

23. How often do you record baseline nutritional status in the nurses notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

24. How often do you record counseling or counseling strategies concerning diet/nutrition in the nurses notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)



## ATTITUDES AND BELIEFS REGARDING HEALTH PROMOTION

25. Please rate the extent to which you agree or disagree with each of the following by checking an appropriate box for all of the questions.

	Agree strongly <input type="checkbox"/>	Agree somewhat <input type="checkbox"/>	Disagree somewhat <input type="checkbox"/>	Disagree strongly <input type="checkbox"/>
a) I do not have enough time to practice health promotion effectively in terms of my own personal health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Hospital nurses are ideally placed to provide health promotion strategies to patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Hospital nurses should not interfere with people's lives by telling them to stop smoking, lose weight or exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Giving detailed explanations to patients tends to worry rather than reassure them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Patients find health promotion dull and boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) I find health promotion dull and boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) The evidence relating diet to health is too uncertain and contradictory for me to advise my patients on what to eat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Helping people to understand how their body works is an important function of the nurse as an educator and counselor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Patients get annoyed when I ask them if they smoke, when smoking is not directly related to their problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Doctors are more appropriate people than nurses to get involved in health promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Nurses don't have enough training in health promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# **ATTITUDES AND BELIEFS REGARDING HEALTH PROMOTION (CONTINUED)**

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
l) People's lifestyles are conditioned by their culture and environment. There's not much individuals can do to change them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Health promotion is guilt-inducing and victim blaming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) In general, patients don't listen to what a nurse says about lifestyle modifications or changes necessary to promote health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) Nurses should be health advocates, insisting that health promotion is included in the political agenda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) Nurses should take a leading role in health promotion in their local community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**26. How important do you think the following factors are in contributing to an individuals' health status? (Please indicate your views by checking the appropriate box for all of the items listed).**

	Very important	Moderately important	Not important	Uncertain
Weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cigarette smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diet/Nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. How effective do you believe each of these activities are in promoting health? (Please indicate your views by checking an appropriate box for ALL the items listed).**

	Probably effective	Probably ineffective	Evidence inconclusive	No opinion
Advice to maintain, reduce or gain weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to stop smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to increase exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to limit alcohol consumption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**28. I would be interested in any other comments you would like to make on the subject of health promotion in the hospital.**

[illegible]

## Appendix C

### Permission for use of Model

Roberta Richardson  
200 Orchard Ridge drive  
Gaithersburg, Maryland 20878

16 June 1995

Cox, C. (1982). An interaction model of client health behavior: theoretical prescription for nursing. Advances in Nursing Science, 5(1), 41-56.

I am a graduate student of Nursing at Wright State University-Miami Valley College of Nursing in Dayton, Ohio. I am beginning preliminary work on my thesis entitled: Health Promotion in a Military Hospital: attitudes, beliefs and practices of hospital nurses.

I am requesting permission for use of Cox's Interaction model of client health behavior in my thesis. I plan to include the schematic of the model as depicted by Cheryl Cox.

Thank you very much for your time. I will be glad to send copies of my thesis upon request.

Sincerely,

Audrey M. Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio 45432  
(513) 427-3520 Home

Roberta Richardson  
200 Orchard Ridge drive  
Gaithersburg, Maryland 20878

16 June 1995

Cox, C. (1982). An interaction model of client health behavior: theoretical prescription for nursing. Advances in Nursing Science, 5(1), 41-56.

OK  
O  
I am a graduate student of Nursing at Wright State University-Miami Valley College of Nursing in Dayton, Ohio. I am beginning preliminary work on my thesis entitled: Health Promotion in a Military Hospital: attitudes, beliefs and practices of hospital nurses.

I am requesting permission for use of Cox's Interaction model of client health behavior in my thesis. I plan to include the schematic of the model as depicted by Cheryl Cox.

Thank you very much for your time. I will be glad to send copies of my thesis upon request.

Sincerely,

Audrey M. Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio 45432  
(513) 427-3520 Home



*Audrey M. Balton*

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Reference number 9507049

Date: 7.24.95

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Sincerely,

*Roberta Richardson*

Roberta Richardson  
Permissions Department  
Editorial Resources

## Appendix D

### Agency Permission for conducting study



Wright State University-Miami Valley  
College of Nursing and Health  
AGENCY PERMISSION FOR CONDUCTING STUDY

THE Wright Patterson Air Force Base Medical Center

GRANTS TO Audrey Marie Bolton

a student enrolled in a program of nursing leading to a Master's degree at Wright State University, the privilege of using its facilities in order to study the following problem: Health promotion in a military hospital: personal behaviors, attitudes, beliefs and practices of hospital nurses

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: 5 Oct 95 Claudia Beadle Chief Nurse Executive  
Signature of Agency Personnel/Title

Audrey M Bolton Margaret C. ...  
Signature of Student Signature of Faculty Director

Appendix E  
Demographic Survey

## NURSE DEMOGRAPHIC DATA

Fill in the blank or place a check mark in the appropriate space.

1. Age (Years) \_\_\_\_\_

2. Gender

\_\_\_\_\_ (1) Male

\_\_\_\_\_ (2) Female

3. Basic Nursing Program

\_\_\_\_\_ (1) Associate

\_\_\_\_\_ (2) Diploma

\_\_\_\_\_ (3) Baccalaureate

4. Highest degree obtained in Nursing

\_\_\_\_\_ (1) Associate

\_\_\_\_\_ (2) Diploma

\_\_\_\_\_ (3) BSN

\_\_\_\_\_ (4) MSN

5. Number of years in nursing practice (years) \_\_\_\_\_

6. Area of clinical expertise (optional) \_\_\_\_\_

7. Employment status

Active Duty (1) \_\_\_\_\_

Civilian (2) \_\_\_\_\_

Reservist (3) \_\_\_\_\_

Appendix F  
Cover Lettr/Consent



## **Wright State University**

Wright State University-Miami Valley  
College of Nursing and Health  
Dayton, Ohio 45435  
513/873-3131  
FAX 513/873-4571

I am an AFIT-sponsored graduate student in the nursing program at Wright State University, Dayton, Ohio. As part of my studies, I am conducting research in the area of health promotions pertaining to nurses in the acute care setting. It is not known what people like yourself think on these issues and this study will attempt to explore these issues.

You are part of a selected sample to be a participant of this project. Participation in this project is voluntary. Your completion of the questionnaires will be considered your willingness to participate. I would like to add that your response is needed if this study is to be successful.

It will take approximately 30 minutes to complete the short questionnaires. To assure anonymity, do not write your name on the questionnaires. Results of this study will be reported as group data and provided to your clinical coordinator. A copy of the results of the study will be available to you upon request. Should you have any questions or concerns, please do not hesitate to call me or my faculty Advisor at your convenience. My Faculty Advisor can be reached at Wright State University at 873-2596.

Audrey Bolton, RN, BSN  
Major USAF  
427-3520

Margaret Clark Graham, Ph.D., RN  
Faculty Advisor

### **Directions:**

Sit back and relax. Complete the following two questionnaires and the demographic section. Please answer all questions. After completing, place the questionnaires in the designated collection box on your unit.

Thank you for your participation.

**Appendix G**  
**Institutional Review Board Consent**

RESEARCH INVOLVING HUMAN SUBJECTS

SC# 1640

Amendment No. #1

ACTION OF THE WRIGHT STATE UNIVERSITY  
SCREENING COMMITTEE  
Assurance Number: M-1021-01

Title: *Health Promotion In A Military Hospital: Behaviors, Attitudes, Beliefs And Practices Of Hospital Nurses*

Contract No.

Principal Investigator: Audrey M Bolton, P.I., Student  
Margaret C Graham, Ph.D, Faculty Advisor  
Department: College of Nursing and Health

The Institutional Review Board named above has taken the following action with regard to the use of human subjects on this proposed project:

  X   Approved

           Approved pending receipt of the items listed \*\*

The conditions, if any, are attached and are signed by the Committee Chairer. If disapproved, the reasons are attached and are signed by the Committee Chairer and by other consultants, if any.

REMINDER: FDA regulations require prompt reporting to the IRB of any changes in research activity, changes in approved research during the approval period may not be initiated without IRB review (submission of an amendment), and prompt reporting of any unanticipated problems (adverse events).

Signed

Date: January 25, 1996

Jack Gruber M.D.  
WSU-IRB

**Appendix H**  
**Permission Letters**



Theo Schofield  
General Practice Research Group  
Department of Public Health and Primary Care  
Gibson Blvd.  
Radcliff Infirmary  
Oxford, England OX26HE

9 May 1995

I am graduate student of Nursing at Wright State University-Miami Valley College of Nursing in Dayton Ohio, USA. I am beginning preliminary work on my thesis entitled: Health Promotion in a Military Hospital: attitudes, beliefs and practices of hospital nurses.

I am interested in the questionnaire used in your study. Can you please send me any information regarding the instruments' development, validity and reliability along with the **copy of the questionnaire**? In addition, I will need information regarding costs and methodological procedures related to the use of the instrument in the event that I choose this instrument for my study.

Thank you very much. I will be glad to share my findings or any aspect of my study upon request. Please include your phone number in any correspondence.

Sincerely,

Audrey M. Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio  
45432  
phone: area code 513  
427-3520  
(please call collect)

P. S. I spoke with you today per phone conversation obtaining approval to use the instrument. Thank you again for your assistance.  
Please sign here giving permission to include a copy of the instrument in the final thesis:

Signature \_\_\_\_\_

*Theo Schofield*

23.5.95

Anita McBride  
4 Kiln Cottages,  
Horton-cum-Studley  
Oxford, OX33 1BQ, England

10 April 1995

I am graduate student of Nursing at Wright State University-Miami Valley College of Nursing in Dayton Ohio, USA. I am beginning preliminary work on my thesis entitled: Health Promotion in a Military Hospital: attitudes, beliefs and practices of hospital nurses.

I am interested in the questionnaire used in your study. Can you please send me any information regarding the instruments' development, validity and reliability along with the copy of the questionnaire? In addition, I will need information regarding costs and methodological procedures related to the use of the instrument in the event that I choose this instrument for my study.

Thank you very much. I will be glad to share my findings or any aspect of my study upon request. Please include your phone number in any correspondence.

Sincerely,

Audrey M. Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio  
45432  
phone: area code 513  
427-3520  
(please call collect)

Please sign here giving permission to include a copy of the instrument in the final thesis:

Signature\_\_\_\_\_

October 3, 1995

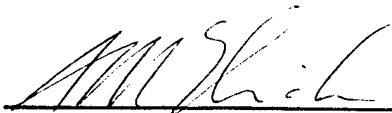
Dear Ms McBride

In reference to our discussion 2 October 1995, I am requesting your signature for permission to revise or modify the Health Promotion in Hospital Questionnaire. I plan to have 3 experts in the field of health promotion/prevention in nursing practice review the instrument for purposes of assessing content validity. Revisions and modifications will be based on the recommendations of these experts as well as the advice of my thesis committee. I will be glad to forward the revised instrument and rationale for changes as soon as possible.

Thank you very much,

Audrey Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio  
45432  
(513) 427-3520

Signature





Date

20 - 11 - 95

Please forward revised instrument and rationale for changes. I may also be able to advise in the light of my experiences in administration & analysis.

by

  
A.S. MCBRIDE

Northern Illinois University   
DeKalb, Illinois 60115-2854

Health Promotion Research Program  
Social Science Research Institute  
Ambulatory Cancer Clients Project  
Cardiac Rehabilitation Project  
Corporate Project  
Older Adults Project  
(815) 753-9670

January 20, 1989

Deanna Collins  
7860 Winding Way South  
Tipp City, OH 45371

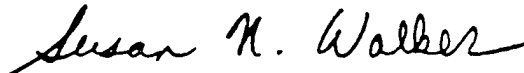
Dear Deanna:

I enjoyed talking with you about your thesis research. You have permission to use the 48-item Health-Promoting Lifestyle Profile in your study of the characteristics and health-promoting lifestyle behaviors of individuals who participate in wellness programs. You may have copies made from the form which I sent previously. Content should not be altered in any way and the copyright/permission statement at the end must be reproduced.

I would appreciate receiving a complete report of your study for our files. We are particularly interested in information about scores (range, mean and standard deviation) on the Lifestyle Profile, reliability coefficients and correlations with other measured variables. If it is possible to share a copy of your thesis, that would indeed be helpful.

Best wishes with your study.

Sincerely,



Susan Noble Walker, Ed.D., R.N.  
Associate Professor and  
Co-Director, Health Promotion Research Program

~~1-815-753-7000 Ill University~~

402 539-6561 UMBB Neo Center

## PERMISSION FORM

I plan to use the *Health-Promoting Lifestyle Profile II* in a research or evaluation project entitled:

HEALTH PROMOTION IN A MILITARY HOSPITAL:  
BEHAVIOR, ATTITUDES, BELIEFS AND PRACTICES OF  
HOSPITAL NURSES

I am enclosing a check for ten dollars (\$10.00) payable to the **University of Nebraska Medical Center College of Nursing**.

ANDREY M BOLTON

Print Name

Andrey M Bolton

Signature

GRADUATE STUDENT

Position

(513) 427-3520

Area Code Telephone #

Mailing Address

2405 N. KNOLL DR

BEAVERCREEK OHIO

45431-2462

~~45431~~

Permission is granted to the above investigator to copy and use the *Health-Promoting Lifestyle Profile II* for non-commercial data collection purposes such as research or evaluation projects provided that content is not altered in any way and the copyright/permission statement at the end is retained. The instrument may be reproduced in the appendix of a thesis, dissertation or research grant proposal without further permission. Reproduction for any other purpose, including the publication of study results, is prohibited without specific permission.

S. Walker

Susan Noble Walker

7/10/95

Date

Please send two signed copies of this page to:

Susan Noble Walker, Ed.D., R.N., F.A.A.N.  
University of Nebraska Medical Center  
College of Nursing  
600 South 42nd Street  
Omaha, Nebraska 68198-5330

Dear Colleague:

Thank you for your interest in the *Health-Promoting Lifestyle Profile II*. The original *Health-Promoting Lifestyle Profile* became available in 1987 and has been used extensively since that time. Based on our own experience and feedback from multiple users, it has been revised to more accurately reflect current literature and practice and to achieve balance among the subscales. The *Health-Promoting Lifestyle Profile II* continues to measure health-promoting behavior, conceptualized as a multidimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the level of wellness, self-actualization and fulfillment of the individual. The 52-item summated behavior rating scale employs a 4-point response format to measure the frequency of self-reported health-promoting behaviors in the domains of health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations and stress management. It is appropriate for use in research within the framework of the Health Promotion Model (Pender, 1987), as well as for a variety of other purposes.

The development and psychometric evaluation of the English and Spanish language versions of the original instrument have been reported in:

Walker, S. N., Sechrist, K. R., & Pender, N. J. (1987). The Health-Promoting Lifestyle Profile: Development and psychometric characteristics. *Nursing Research*, 36(2), 76-81.

Walker, S. N., Volkan, K., Sechrist, K. R., & Pender, N. J. (1988). Health-promoting lifestyles of older adults: Comparisons with young and middle-aged adults, correlates and patterns. *Advances in Nursing Science*, 11(1), 76-90.

Walker, S. N., Kerr, M. J., Pender, N. J., & Sechrist, K. R. (1990). A Spanish language version of the Health-Promoting Lifestyle Profile. *Nursing Research*, 39(5), 268-273.

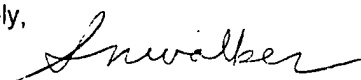
- A manuscript describing the reliability and validity of the revised instrument is in preparation. For *Health-Promoting Lifestyle Profile II*, the Cronbach's alphas are as follows: Health Responsibility (.861), Physical Activity (.850), Nutrition (.800), Spiritual Growth (.864), Interpersonal Relations (.872), Stress Management (.793), Total HPLPII (.943). A principal axis factor analysis supported the presence of the six factors used as subscales.

Copyright of all versions of the instrument is held by Susan Noble Walker, EdD, RN, FAAN, Karen R. Sechrist, PhD, RN, FAAN and Nola J. Pender, PhD, RN, FAAN. Permission no longer will be given to use the original *Health-Promoting Lifestyle Profile*. The extensive demand for use has been gratifying to us, but also costly. To offset the costs associated with revision, psychometric evaluation and distribution of the *Health-Promoting Lifestyle Profile II* at the University of Nebraska, there is now a small charge for use. If you wish to use the instrument, please **complete and sign 2 copies of the enclosed permission form**, along with a **check for \$10.00 made payable to the University of Nebraska Medical Center College of Nursing** and return to:

Susan Noble Walker, Ed.D., R.N., F.A.A.N.  
University of Nebraska Medical Center  
College of Nursing  
600 South 42nd Street  
Omaha, Nebraska 68198-5330

A copy of the instrument, scoring instructions, signed permission for use and a list of publications reporting research using all versions of the instrument will be forwarded to you.

Sincerely,



Susan Noble Walker, EdD, RN, FAAN

Professor and Chair, Department of Gerontological, Psychosocial and Community Health Nursing

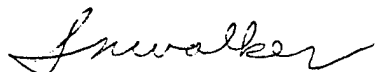
University of Nebraska—Lincoln   University of Nebraska Medical Center   University of Nebraska at Omaha   University of Nebraska at Kearney

Dear Colleague:

Thank you for your request and payment to use the *Health-Promoting Lifestyle Profile II*. As indicated in the enclosed form, you have permission to copy and use the enclosed *Health-Promoting Lifestyle Profile II* for non-commercial data collection purposes such as research or evaluation projects provided that content is not altered in any way and the copyright/permission statement at the end is retained. The instrument may be reproduced in the appendix of a thesis, dissertation or research grant proposal without further permission. Reproduction for any other purpose, including the publication of study results, is prohibited without specific permission.

We thank you for your interest in the *Health-Promoting Lifestyle Profile II* and wish you much success with your efforts.

Sincerely,



Susan Noble Walker, EdD, RN, FAAN  
Professor and Chair,  
Department of Gerontological, Psychosocial and Community Health Nursing

Encl.: Health-Promoting Lifestyle Profile II  
Scoring instructions  
List of publications reporting use of the original Lifestyle Profile

## Appendix I

Process for evaluating content validity

Original Health Promotion in Hospital Questionnaire

List of Nurse Experts



Dr. Joan Padgett- Ph.D., RN, CS Adult/Psych Mental Health  
Assistant Professor, Wright State University  
College of Nursing and Health

Dr. Susan Noble Walker-EdN, RN, F.A.A.N  
University of Nebraska Medical Center  
College of Nursing  
Professor and Chair, Department of Gerontological,  
Psychosocial and Community Health Nursing

Barbara Fowler- MSN, EdN, RN, C  
Associate Professor of Nursing, Wright State University  
College of Nursing and Health

October 3, 1995

I am a graduate student of nursing at Wright State University College of Nursing and Health in Dayton, Ohio. I plan to conduct a study using the questionnaire enclosed. The proposed thesis is entitled:

Health Promotion in a Military Hospital:  
Personal behaviors, attitudes, beliefs and  
practices of hospital nurses

Based on your expertise in the field of health promotions and disease prevention, I am requesting your review of the instrument that I plan to use. Specifically, I am interested in your analysis regarding content validity of the Health Promotion in Hospital Questionnaire. Specific data I am researching are the health promotion attitudes, beliefs and practices of nurses practicing in the acute care setting. The study will focus on the target issues of smoking, alcohol, exercise and diet/obesity. The instrument I plan to use to measure personal behaviors is entitled the Health Promoting Lifestyle Profile II which has established reliability and validity.

In reference to Lynn's article, I will need your numerical rating (1 through 4) of each item on the questionnaire to indicate it's relevance to my research questions #3, #4, & #6 (see research questions). In addition, I will need your input regarding omitted items that should have been included in the questionnaire. Upon receipt of your analysis, I plan to revise or modify the questionnaire within reasonable means based on the advice of my thesis committee. The insight gained regarding the content validity of this instrument as it pertains to my study will be invaluable and will certainly impact this research. Your expert knowledge is greatly appreciated and I look forward to any input you may have. **Be sure to include a synopsis of your credentials pertaining to health promotion and disease prevention.**

Thank you very much,

Audrey M. Bolton  
2405 N. Knoll Drive  
Beavercreek, Ohio 45432  
(513) 427-3520

A quick reference to Lynn's article is as such:

- 1= not relevant
- 2= unable to assess relevance without item revision, or item is need of such revision that it would no longer be relevant
- 3=relevant, but needs minor alteration
- 4=very relevant and succinct for all content validity assessments
- \* In addition to the ratings, indicate any items that should have been included

4 Jan, 1996

Dr. Margaret Clark-Graham, Barbara Wise, and Dr. Roberta Pohlman,

I am needing you to review the Instrument I plan to use for my thesis. Just as a refresher from the proposal defense, I am including my abstract, etc. in hopes that it will make more sense to you. Originally, I had not intended to revise the instrument because I felt it would be beyond the scope of my thesis work. However, following the expert advice of Dr. Susan Walker, I obtained permission from the instrument author and content validity has been reviewed regarding this instruments' use in my study and revisions were made.

The three experts that reviewed and offered suggestions were: Dr. Susan Walker (worked with Nola Pender in Nebraska), Dr. Barbara Fowler (WSU) and Dr. Joan Padgett. The suggestions they made hinged on a packet of information that I sent detailing my domain of interest ( the nurse role as educator and advocate) in the practice of health promotion. I also used the nursing process as a guide pertaining to the nurses' role in planning, assessment, implementation and evaluation. The collective input from these experts was very helpful and included :

1. Adding questions within each subheading of alcohol, smoking, etc to sufficiently measure nursing practice issues.
2. the format for each subheading is standardized and easy to follow.
3. revisions regarding the Attitudes and Beliefs of Health Promotion include minor word changes and deletion of a few items that were not applicable to this study.
4. Noteworthy are revisions of questions # 16- 19 (original instrument). These original questions included extraneous items and unrelated issues that were deleted. The revised instrument questions # 26 and #27 offer a more streamlined format, pertinent to my thesis focus (i.e. smoking, alcohol, nutrition and exercise.

As a reminder, I will also be using the Health Promotion Lifestyle Profile II to measure nurses "personal habits" and a demographics survey will be included as well.

Please review the revised instrument and sign below for your approval regarding my plans to survey nurses using this version.

Following your approval, I will meet again with the statistician and will submit the revised instrument for IRB approval.

Then, at last, I hope to survey the nurses!!!

Thank you very much,  
Audrey Bolton  
Home 427-3520

p.s. I still need to insert the boxes on the instrument for the nurses to check.

Signature ..... *Barbara Wise* .....  
Date ..... *1-10-96* .....

4 Jan, 1996

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Signature ..... *Roberta L. Pohlman PhD* ..... *Thesis Comm. Member*  
Date ..... *5 Jan 95* .....

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Signature ..... *Margaret M. Clark-Graham* .....  
Date ..... *Jan 19, 1996* .....

# HEALTH PROMOTION IN HOSPITAL PRACTICE

*This questionnaire is based on one used in a similar survey in General Practice. Some questions may seem to you slightly inappropriate but for comparative purposes we would value your views. The aim is to collect information about preventive health care and advice offered to patients aged approximately between 16 and 64 (i.e. excluding children and retired people).*

**All the information you give will be treated as  
STRICTLY CONFIDENTIAL  
and will be non-attributable.**

---

## **ABOUT YOURSELF** *(Please circle)*

1. Are you a ☐ Registered Nurse? ☐ Enrolled Nurse?

Grade *(Please circle)* :      C   D   E   F   G   H

*(If you are not a qualified nurse in hospital practice, this questionnaire has been sent to you in error. We would be grateful if you could indicate this and return it to us in the enclosed pre-paid envelope).*

2. What is your job title?.....

3. Specialty *(Please specify)*.....

---

## SMOKING

4. Under what circumstances do you ask patients about smoking?  
(Tick all that apply)

- ☐ When a patient asks for advice about smoking
- ☐ When a patient has smoking-related disease
- ☐ When a woman is taking oral contraceptives
- ☐ When a patient has high blood pressure
- ☐ Routinely with most adult patients
- ☐ Other (please specify).....

5. If a patient requires advice on stopping smoking, which of the following are you likely to do? (Tick all that apply)

- ☐ Offer simple advice
- ☐ Offer literature or leaflets
- ☐ Suggest a prescription (e.g. Nicorette)
- ☐ Suggest a further consultation to review progress
- ☐ Refer to someone else (Please specify).....
- ☐ Refer to a stop smoking group
- ☐ None of these
- ☐ Other (please specify).....

6. Do you record smoking status (i.e. whether or not they smoke) in the nursing notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
(<20%) (20-49%) (50-69%) (70-89%) (90-100%)

## ALCOHOL

7. Under what circumstances do you enquire about a patient's drinking habits?  
(Tick all that apply)

- ☐ When a patient asks for advice about drinking
- ☐ When a patient presents with anxiety or depression
- ☐ When a patient has clinical signs or symptoms (inc. injuries arising from accident which might be related to alcohol consumption)
- ☐ When a patient has social or marital problems
- ☐ When a patient has upset stomach with no obvious cause
- ☐ When a patient's breath smells of alcohol
- ☐ Routinely with most adults
- ☐ Other (please specify).....

8. If you have identified a patient with a drinking problem, which of the following are you likely to do? (Tick all that apply)

- ☐ Offer simple advice about safe limits
- ☐ Offer literature or leaflets
- ☐ Suggest use of a drinking diary
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to a physician (please specify)
- ☐ Refer to a specialist agency or self-help group
- ☐ Refer to a psychologist/psychiatrist/social worker
- ☐ None of these
- ☐ Other (please specify).....

9. Do you record the amount a patient drinks in their notes?

- Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
(<20%) (20-49%) (50-69%) (70-90%) (90-100%)



## EXERCISE

10. Under what circumstances do you ask patients about exercise ? *(Tick all that apply)*

- ☐ When a patient asks for advice about exercise
- ☐ When a patient is overweight or obese
- ☐ When a patient presents with a stress-related problem
- ☐ When a patient is depressed
- ☐ When a patient has high blood pressure
- ☐ When a patient has heart disease
- ☐ When a patient is of retirement age
- ☐ Routinely with most adult patients
- ☐ Other (please specify).....

11. If a patient requires advice on appropriate exercise levels, which of the following are you likely to do? *(Tick all that apply)*

- ☐ Offer simple advice
- ☐ Offer literature or leaflets
- ☐ Offer information about local sports centres and recreation facilities
- ☐ Suggest a keep fit class
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to someone else (please specify).....
- ☐ None of these
- ☐ Other (please specify).....

12. Do you record whether or not a patient takes regular exercise in their notes?

- Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( <20% ) ( 20-49% ) ( 50-69% ) ( 70-89% ) ( 90-100% )

## DIET AND OBESITY

13. Under what circumstance do you ask patients about diet ? *(Tick all that apply)*

- ☐ When a patient asks for dietary advice
- ☐ When a patient is overweight or obese
- ☐ When a patient has high blood pressure
- ☐ When a patient has gastro-intestinal problems
- ☐ Routinely with most adult patients
- ☐ None of these
- ☐ Other (please specify).....

14. If a patient requires advice about losing weight or improving their diet which of the following are you likely to do? *(Tick all that apply)*

- ☐ Offer simple advice
- ☐ Offer diet sheet
- ☐ Offer literature or leaflets (other than a simple diet sheet)
- ☐ Suggest reviewing progress at a later date
- ☐ Refer to a physician (please specify).....
- ☐ Refer to a dietitian
- ☐ Refer to another agency or self-help group
- ☐ None of these
- ☐ Other (please specify) .....

## VIEWS ON PREVENTION AND HEALTH PROMOTION

15. Please rate the extent to which you agree or disagree with each of the following by ticking an appropriate box for ALL of the questions.

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
a) I do not have enough time to practice health promotion effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Hospital nurses are ideally placed to give health education to patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Hospital nurses should not interfere with people's lives by telling them to stop smoking, lose weight or take more exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Giving detailed explanations to patients tends to worry rather than reassure them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Patients find health education dull and boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) I find health education dull and boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) The evidence relating diet to health is too uncertain and contradictory for me to advise my patients on what to eat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Helping people to understand how their body works is an important part of the nurse/patient relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Patients get annoyed when I ask them if they smoke, when smoking is not directly related to their problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Preventive care cannot be organised without good records and systematic call and recall registers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Doctors are more appropriate people than nurses to get involved in health promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Nurses don't have enough training in health promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) People's lifestyles are conditioned by their culture and environment. There's not much individual nurses can do to change them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## VIEWS ON PREVENTION AND HEALTH PROMOTION (cont.)

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
n) Health education is guilt-inducing and victim blaming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) In general, patients don't take much notice of what a nurse says about their lifestyle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) Health Authorities should provide more assistance to nurses in the organisation of preventive care and health promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q) Nurses should be health advocates, insisting that health promotion is put on the political agenda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r) Nurses should take a leading role in the prevention of disease in their local community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s) The government should take more responsibility for promoting health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t) Smoking should be banned on hospital premises				
i. for staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. for patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. How important do you think the following factors are in contributing to an individuals coronary heart disease risk? *(Please indicate your views by ticking an appropriate box for ALL of the questions).*

	Very important	Moderately important	Not important	Uncertain
Blood pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cigarette smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood cholesterol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How important do you think the following factors are in individuals coronary heart disease risk?  
(cont.)

	Very important	Moderately important	Not important	Uncertain
Socio-economic status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educational attainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. How effective do you believe each of these activities are in the prevention of coronary heart disease? (Please indicate your views by ticking an appropriate box for ALL of the questions).

	Probably effective	Probably ineffective	Evidence inconclusive	No opinion
Treatment of high blood pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to reduce weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to stop smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to increase exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice on stress reduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dietary advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. How effective do you believe each of these activities are in the prevention of deaths from cancer? (Please indicate your views by ticking an appropriate box for ALL the questions).

	Probably effective	Probably ineffective	Evidence inconclusive	No opinion
Routine cervical cytology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice on stress reduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Routine mammography	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular breast self-examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice to stop smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dietary advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## PATIENT'S OCCUPATION

19. Do you record a patient's occupation in their notes?

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Usually ☐ Always ☐  
( $<20\%$ ) (20-49%) (50-69%) (70-89%) (90-100%)

20. We would be interested in any other comments you would like to make on the subject of preventive care and health promotion in hospital.

.....

.....

.....

.....

.....

.....

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.....

.....

.....

Please check that you have answered all the questions and return the questionnaire in the enclosed envelope.

**THANK YOU VERY MUCH FOR TAKING THE TROUBLE TO ANSWER THIS QUESTIONNAIRE**

## Appendix J

### Signage

NURSES  
PLEASE PUT COMPLETED  
HEALTH PROMOTION QUESTIONNAIRES  
IN THE BOX.  
THANK YOU!  
DEADLINE FOR COMPLETION IS:



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